

**An exploration of the attitudes, knowledge, willingness and future
intentions to work with older people among Saudi nursing students in
baccalaureate nursing schools in Saudi Arabia**

Submitted in fulfilment of the requirements for the degree of PhD

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Abstract

The kingdom of Saudi Arabia, like the rest of the world, has a growing older population with urgent health care needs. However little prior research has been undertaken on this topic. In the light of this, the aim of this study was to explore the attitudes, knowledge, willingness and intentions to work with older people among nursing students, and to consider the effects of clinical nursing practice on such factors in the first year and the final (pre-registration) year of training in three major university hospitals. The study was underpinned by the theory of planned behaviour (Fishbein and Ajzen, 1975) which was used as a conceptual framework to explore the relationships between attitudes, subjective norms, perceived behavioural control and behavioural intentions amongst 566 nursing students. The study used a mixed methods design comprising of surveys with the nursing students and 132 faculty members and three focus groups with faculty members to explore their feelings about gerontological education in-depth. The questionnaires contained a range of previously validated instruments including Kogan's Attitude Towards Older People scale, Palmore's Facts on Ageing Quiz, a measure of students' willingness to work with older people and a measure of their perceived intention to work with them. Open-ended questions were also included. Data were analysed using both multivariate statistics and content analysis.

The results provided some interesting and important insights into the complex factors potentially shaping students intentions to work with older people. For example the 566 nursing students who participated in this study displayed a lack of basic knowledge of the physical and behavioural aspects of ageing but held largely positive attitudes towards older people. Despite such positive attitudes a majority of the participants indicated that they would prefer not to work with older people after graduation, although those students who indicated that they would prefer to work with them had the most positive attitudes and the strongest willingness and intent to take care of older people. The data also highlight the potential of clinical training experience with older adults to improve the previous variables (attitudes, willingness and intentions). The qualitative data from both students and teachers highlighted a range of complex factors that in part explained some of the quantitative findings. These related to the influence of subjective norms and perceived control. Therefore at a cultural level Saudi students are exposed to strong positive norms in relation to older people but on entering training may be exposed to negative professional norms as to the status and desirability of gerontological nursing as a career. This, together with students' limited perceived control due to inadequate preparation for practice offer potential explanations as to the disparity between attitudes and behavioural intentions. The qualitative data also highlight the need for greater attention to the preparation of nursing students, with the provision of integrated skills and knowledge on the care of older people.

The study also provides a limited critique of the theory of planned behaviour, which whilst supported in part cannot account fully for the complex cultural and professional factors shaping students future career intentions. The thesis, the first of its kind undertaken in Saudi Arabia, concludes with some reflections and suggestions for further research and the actions needed if the preparation of students to work with older people is to improve in the future.

Acknowledgements

Thanks go first to God Almighty, Allah the most merciful, compassionate and gracious, for enabling me to conduct this research.

This thesis is dedicated to my family - my mother Hamady, my sister Norha and my brothers Ibrahim and Salam - for encouraging autonomy and offering unlimited support.

I would like to thank my supervisors, Professor Roger Watson and Professor Mike Nolan, for their support and assistance through this endeavour. They helped me to establish realistic goals for completing each phase of this thesis and proved to be valuable proponents of this research study. I am eternally grateful for their guidance, supporting and encouragement throughout this experience. It was an honour to work with expertise like theirs.

Special thanks to statisticians Dr. Mike Campbell, Jean Russel and Dr. Ezz Hussen, who provided guidance and assistance with statistics in this study.

Thanks also to Prof Anne Peat, Dean of the School of Nursing and Midwifery, Dr. Penny Curtis, Amand Cowan, Dr. Tony Blackett, Helen Mason, Tracey Pacan and Janet Rodrigue for their administrative concern and direction.

Special thanks to Dr. Nazek Zakaria, Dr. Ann Williams, Dr. Mark Fulkner, Linda Nicklin, and Dr. Patsy Stark for support and for helping make this a scientifically sound, clear, and readable thesis.

A special expression of thanks goes out to my friends Zainab, Rokaya, Ahlam, Wafa, Fraial and Rana for their suggestions that contributed so much to this thesis.

Finally, I am grateful to the research participants, nursing students and nursing faculty members in nursing schools. If they had not shared their views and inspirations, this research would not have been possible.

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Glossary of Terms

α : Statistical Significance Alpha

ANOVA: Analysis of Variance

ATOP: Attitudes Toward Old People Scale

BSN: Baccalaureate Science Nursing

CVA: Cerebral Vascular Accident

EPCI: Elderly Patient Care Inventory

ES: Sample size

FAQ2: Facts on Aging Quiz 2

ICU: Intensive Care Unit

N: Number of participants in sample

NT: Nursing Teacher

SD: Standard Deviation

SPSS: Statistical Package for the Social Sciences

TPB: Theory of Planned Behaviour

TRA: Theory of Reasoned Action

University 1: university in western region

University 2: university in central region

University 3: university in eastern region

WHO: World Health Organization

Personal reflections on the origins of the thesis

The inspiration for this journey started when I graduated from nursing school. I initially worked in a hospital as a staff nurse, and focused on developing my professional skills in the care of older people. My observations suggested that many nurses lacked the knowledge to provide optimum care to older people and I felt that they deserved better care than they were receiving. To provide good care, I believe we need to see older people as unique individuals with rich histories, a wealth of knowledge, warmth, love and a willingness to share. However, I was uneasy, as it seemed that my colleagues often did not recognise their needs. This challenged my view as to the purpose of gerontological nursing, and I wanted to improve my understanding. Due to the lack of expertise in gerontological nursing in Saudi Arabia I travelled to the UK to complete my Master's degree at Swansea (University of Wales). During my studies I became convinced of the need to improve the understanding of the needs of older people in Saudi Arabia, especially if we are to provide good rehabilitation and on-going care. This seemed to require more nurses who actively wished to work with older people. On my return to Saudi Arabia I worked in a nursing school as a clinical educator with undergraduate nursing students, teaching the student nurses clinical nursing procedures in fundamental nursing care. In this role I found that student nurses needed to know more about the proper way to care for older people. Their knowledge of such people was limited and the amount of gerontology in their programme was small. Not surprisingly, most students lacked confidence and skills to adequately assess and support older people. It seemed to me that this was also likely to influence their future career choices.

I discussed this issue with colleagues and students and they agreed that this was an area where much more work was needed. I wanted to engage in a study that might address issues about students' and faculty's current views about, and experiences of, gerontological education for student nurses in Saudi Arabia. In pursuing this aim, I once again travelled to the UK to continue my ambition and to undertake further studies in gerontology. I studied gerontological nursing at Nottingham University as an advanced nursing practice (ANP) for one year at postgraduate diploma level to increase my knowledge of gerontology nursing education. Subsequently I started my PhD journey at the University of Sheffield in gerontological nursing research to evaluate gerontology nursing education in Saudi Arabia.

An overview of the thesis

This thesis has seven chapters: chapter 1 includes an introductory background to the study; chapter 2 gives an extensive literature review; chapter 3 discusses methodology; chapter 4 explores the quantitative analysis results; chapter 5 explains the qualitative analysis results; chapter 6 discusses the results and chapter 7 gives the conclusions and recommendations from the study. An outline of the structure of each chapter is as follows:

The first chapter has four main sections. The first section provides an overview of the background to the study; the second discusses nursing programmes in Saudi Arabia, while the third section presents the study's aim and objectives. The final section summarises the conceptual framework underpinning the study.

The second chapter contains the literature review, organised into five sections. Section one discusses the research strategy, while the second section explores previous studies of the attitudes of nursing students towards and knowledge of older people. The third section examines previous studies looking at nursing students' clinical experiences with older people. The fourth section highlights the potential for gerontological education programmes to change nursing students' attitudes toward older people. The fifth section moves forward to more specific research questions that the thesis seeks to address.

The third chapter considers methodology and is organised in ten sections, addressing:

- The research design
- Research questions and hypotheses
- The psychometric testing of research instruments
- The pilot study
- Issues concerning stability and validity
- Sampling procedures
- Ethical issues
- Methods of data collection
- Methods of data analysis, both quantitative and qualitative

The fourth chapter presents the analyses of the quantitative data in four sections. The first section deals with the demographic characteristics of the nursing students and the second considers the demographics of the teacher sample. In the third section, the research questions are answered, whilst the fourth restates the alternative and null

research hypotheses, and presents the results of the statistical tests that were applied to these hypotheses.

The fifth chapter explores the qualitative analysis, and is divided into two main sections. The first discusses the students' views regarding the care of older people as a career choice, with several key themes and categories emerging, namely: students' life experience with older people prior to the nursing context; cultural, social and religious factors; and the influence of students' learning experience. The second section highlights important issues that arose during the focus group discussions with nursing teachers in the three nursing schools, and considers: the influence of clinical experiences; the influence of teaching and learning experiences; teachers' roles; and finally, teachers' views on bridging the gaps between theory and practice in the curriculum.

The sixth chapter presents the discussion and is divided into ten sections, dealing with:

- Introduction
 - Reflections on the usefulness of the Theory of Planned Behaviour
 - Attitudes toward older people
 - Intentions toward working with older people
 - The comparison between Saudi and British nursing students' intentions of working with older people
 - Knowledge about older people
 - Gerontological nursing curriculum
 - Clinical experiences with older people.
 - Work preferences with older people as a future career
 - Summary
- The final chapter summarises the conclusions and recommendations in four sections. Firstly, the implications of research for nursing education, research and policy are discussed. Secondly, the contribution to knowledge provided by this research study is presented. Thirdly, limitations of the study are discussed. Finally, the thesis concludes with an overview of the main research findings emerging from the quantitative and qualitative data.

Chapter 1

Introduction

1.1 Care of older people in Saudi Arabia

"Ageing is a privilege and a societal achievement. It is also a challenge, which will impact on all aspects of society in the 21st century. It is a challenge that cannot be addressed by either the public or private sectors alone: it requires joint approaches and strategies"

(World Health Organization, 2005)

People aged 60 and over numbered around 600 million worldwide in 2000, and these figures are expected to reach 1.2 billion by 2025 and 2 billion by 2050. Of these, about two thirds currently live in the developing world, and by 2025 it is estimated that this figure will rise to 75% (WHO, 2005).

Globally, this increase in both overall numbers of older people and the relative percentage compared to the total population has considerable implications both for older people themselves and for services generally (Fielding, 1986). This will lead to changing demands on health care systems in both developing and developed countries. Saudi Arabia is no exception.

The Kingdom of Saudi Arabia is one of the largest countries in the Middle East and during recent decades has experienced a rapid expansion in health services (Aldossary *et al.*, 2008; Abu-Zinadah, 2006; Aboul-Enein, 2002; Tumulty, 2001; Al-Osimy, 1994). The Ministry of Health was created in 1954, together with public hospitals and primary health centres, and in 1958 nurse training was established in Saudi Arabia (Aboul-Enein, 2002). The health care system in Saudi Arabia can be divided into government and private sectors, with the government services being free of charge both to Saudi and non-Saudis, with very few restrictions. Saudi Arabia provides primary, secondary and tertiary health care services. Large hospitals exist in major cities with advanced technology, providing open-heart surgery, kidney transplantation and oncology therapy (Al-Osimy, 1994). However, despite expansion, health expenditure is expected to increase dramatically, outstripping the rate of population growth, with demand for hospital beds likely to grow from 51,000 to 70,000 (Ministry of Health Report, 2007). Several key issues will influence the delivery of health care

in Saudi society in the near future. In particular, Saudis are becoming older and the percentage of the population over 60 is rising, and is expected to more than double by 2020 (Earth Trends Report, 2003¹). By this date, the number of old people is expected to grow from approximately 1 million (4 % of the population) to roughly 2.5 million (7 % of the population). This increase in numbers of older people presents numerous challenges to the health care system in Saudi Arabia, and especially to the nurses who provide services to older clients with both acute and chronic conditions (Medical Health sector report, 2004²).

With regard to a nursing workforce to support this increasing demand, Jackson and Gary (1991) conducted a health workforce study whose findings indicated that approximately 25,000 nurses were recruited in the kingdom of Saudi Arabia, of whom only 8.5% were Saudi nationals, with 91.5% being expatriates. Whilst expatriates are a highly valuable resource, it is questioned whether non-Saudis can fully understand the cultural needs of the population (Luna, 1989). Al-Osimy (1994) has called for greater emphasis to be placed on training Saudi nationals as nurses, something which others also promote (Aboul-Enein, 2002). The current changes to the health care system, as well as the shortage of nursing personnel, have created problems for older adults in accessing adequate health care of suitable quality. It is estimated that Saudi Arabia will require at least 25 years to prepare sufficient Saudi nurses to meet 30% of the Kingdom's nursing workforce requirements based on the current number of existing education places (Abu-Zinada, 2006). The current acute shortage of qualified Saudi nurses in both hospitals and health centres highlights the need for an urgent review of the Kingdom's present and future capacity for nursing training. A major initiative is needed to raise the status of nursing generally in Saudi Arabia, but particularly for those working with older people.

In light of the above, health care provision for older people in Saudi Arabia is not yet as well developed as general services, with studies concerning older peoples' needs being scarce (Al-Shammari *et al*, 1995b). In particular, healthcare of older people in

¹ Available at: www.earthtrends.wri.org. [Accessed April 20, 2006].

² Available at: www.us-saudi-business.org/pub.htm. [Accessed March 4, 2006].

the Kingdom is in the early stages of development, despite the fact that chronic diseases in the older population are now the primary conditions for which older people seek healthcare. Despite this, there are no special hospital wards for older patients in Saudi Arabia, and they are treated by general internists (Al-Shammari *et al*, 2000) highlighting the need for a cost-effective national programme for the care of older people in Saudi Arabia.

To throw more light on these issues, a study was conducted at the Department of Family and Community Medicine in Saudi Arabia to elicit the opinions of decision makers (both medical and non-medical) on the types of facilities, location and culturally acceptable levels of service for the health care of older population in Saudi Arabia (Al-Shammari *et al*, 1995a). This concluded that establishing special health care facilities able to respond directly to older peoples' health needs was favoured by the majority of respondents.

The Saudi cultural tradition for supporting older people - one that puts a premium on personally caring for one's family, particularly disabled, sick and older people - remains strong in the Kingdom, and is underpinned largely by religious faith. Furthermore, in Eastern cultures generally, old age is admired as a holy state of great religious significance and the aged are given considerable respect within the family (Al-shahri, 2002). In Saudi culture, older people are regarded with great admiration and respect: for example, it is customary for everyone to stand up when they enter a room, they are allocated the best seats and they are offered drinks and food before anyone else. They are addressed in soft voices and are not called by their first names, but instead are referred to as the father or mother of the oldest son (even if they have a daughter who is older than their son). Saudi young people are expected to be polite and restrained, and even avoid smoking cigarettes or chewing gum when older people are present. In the home environment, an older person's views usually prevail.

In health service facilities, older patients would not expect any dramatic changes to the way they are accustomed to being treated. However, the emphasis on the family potentially raises tensions with formal support. Whilst there is no doubt that the older population is growing, increasing the need for adequate health care for Saudi older people, the Saudi culture dictates that it is the family that is primarily responsible for

their care. Such cultural and religious considerations pose unique challenges to service providers when entering Saudi homes. Saudis, particularly those that are older, are not accustomed to the profession of social workers or in-home nurses. Furthermore, Abalkheil (1988) states that it is regarded as religiously condemnable and socially irresponsible for a son to send his parents to a nursing home instead of looking after them and providing care at home. However, as Al-Sadhan (2000) points out, the severity of the needs of older people has increased and nursing home healthcare is expected to grow significantly in the coming years in Saudi Arabia (Medical Health Sector, 2004). This is a primary concern for health care providers in Saudi Arabia.

Mahfouz *et al* (2004) report that Saudi older patients are currently dissatisfied with health services in Saudi Arabia due to the lack of specialty clinics and a lack of skilled nursing. Mufti (2002) criticizes the limited response of the health services in Saudi Arabia to older people's care in acute care hospitals, whilst Al-Senany (2003) claims that hospitals are not ideal for older persons with long term conditions, with high rates of accidents (62.5%), mostly occurring in patients aged 60 years or above. The suggestion is that this may be due in part to nursing staff lacking the skills and time necessary to care for longer-term older patients inside hospitals.

Clearly there is a need not only for more nurse training in Saudi Arabia, but for such training to equip nurses with the skills needed to support older people. Any attempt to provide high quality care for older people must take into consideration both nurses' attitudes towards older people and their knowledge of the ageing process. This is important, as the increasing older population in Saudi Arabia calls for more nurses who are prepared to work in the field of gerontological nursing (Mufti, 2002; Omer 1997; Zakari, 2005). Exploring issues to do with gerontological nursing was the impetus behind this study. Such a study is urgently needed.

1.2 Background and Significance

Globally, the ageing population is currently one of the main issues facing international health care systems. It is a recognized fact that with advancing age, the likelihood of developing health problems and chronic disease will increase and the

demand for health care resources will rise. Heikkinen *et al.* (1983) report that older people's way of life has undergone faster changes during the process of industrialization, which has altered the physical living conditions of a growing proportion of older people, meaning that information and social planning have become essential. Similarly, Watson (2008) claims that nursing organizations have a responsibility with regard to age: they have to be involved in the organization of care for older people in different care settings such as nursing homes, acute care and long-term care settings, and they need to understand the changes involved in the ageing process. The impact of these changes will be felt by the young nurses of the future, who will be faced with the challenging task of caring for this older population in a range of different care settings. This task may be affected by personal beliefs, attitudes, values, culture, experience or observations.

Early, Reinhardt and Quinn, (1979) recognized that the physiological and mental health of older people are closely interrelated, and in many people's judgment, should not be separated. Also, Stevens and Crouch (1995) point out that in both practice and public perception the nursing profession and the aged have always been linked. It is for this reason that major problems in gerontology nursing education revolve around attitudes toward older people as this study was taken account of and has been evident throughout several studies (Howeidi and Hassan, 2005; Zakari , 2005; Mckinlay and Cowan,2003; Lookinland *et al*, 2002; Nolan *et al.*,2001 Hawk, 2001; Soderhamn *et al.*, 2001; Brown, 1999; Sheffler, 1995; Wei , 1995; Kevin and Hope, 1994; Wilhite and Johnson, 1976).

The throw more light on these problems the numerous of the studies in western counters such as the USA and the UK have proposed that nursing students tend to have positive attitudes toward older adults and/or toward the care of older people (Beard *et al*,2004 ; Ryan & McCauley, 2004; McKinlay and Cowan 2003; Nolan *et al.*, 2002; Lookinland, 2002;Schechterly, 2000 Lareau, 2000; Tennies, 1995; Wei 1995; Oglesby, 1992; Kuhn, 1990), although some have found negative attitudes, which may affect the profession's ability to meet the growing demand for qualified nurses to care for older people (Herdman, 2002; Soderhamn *et al.* 2001; Hoffman 2000; Happel 1999; Steven and Crouch, 1998; Ebersol and Hess, 1997). Moreover, their perceived attitudes toward the gerontology field might make it difficult to recruit

the nurses required in this area. The possibility that older people were being abused within the caring sectors came to public attention in 1960 due to ageism stereotypes and negative misconceptions of the aged (Basford and Thorpe, 2004). In addition, in Canada in the mid-1990s, several researchers and government officials decided to use different labels for the terms "elder abuse" and "neglect due to ageism stereotype." This ageism negative stereotype recognized in Canada may be due to inadequate preparation of nurses and social workers for careers in gerontology, which influences their knowledge and attitudes as well as their motivation for work with older people (Bianchini, 2000). Hence, if these ageism stereotypes persist in nursing care, they may lead to nursing malpractice and negligence towards older people as result of negative attitudes by nursing students, and a preference not to work with older adults may affect their career decisions. Montoya (1993) reports that there is evidence that human service providers display consistent negative ageism in their attitudes and behaviours toward older people.

On the other hand, in Eastern countries such as Saudi Arabia the previous research is limited and has not examined students' and professionals' attitudes and intentions toward the care of older people, with a focus on factors such as personal, educational, or clinical experiences that positively or negatively influence attitudes and intentions. Zakaria (2005) noted that little is known about Saudi nursing students in nursing programs with regard to their attitude, willingness, and intention to work with older people. The majority of this brand of study has been evaluated and examined in developed countries. While, few studies have been found in Eastern countries that have investigated these experiences (Howeidi & Al Hassan, 2005; Zakeria, 2005; Hweidi & Al-Obeisat, 2006).

However, since the student nurse of today is the health care provider of tomorrow, the attitudes of these baccalaureate students toward older patients is a vital concern. For that reason, the study of attitudes held by baccalaureate nursing students toward older people continues to be a major focus of concern for nursing educators and for nursing research in gerontology worldwide (Howeidi and Al Hassan, 2005 ; Hawk, 2001; Soderhamn *et al.*, 2001; Brown, 1999; Sheffler, 1995; Kevin and Hope, 1994; Wilhite and Johnson, 1976). While, since the 1950s, studies have identified negative attitudes towards geriatric nursing among registered nurses and nursing students (Clare &

Tulpule, 1994). The number of nurses interested in working with older people has decreased (Herdman, 2002; Soderhamn *et al.* 2001; Happell, 1999). In contrast, several studies in Taiwan have showed that nursing students hold positive attitude toward older people (Wei,1995; Liou and Hsu,1994). While, exposure to unpredictable clinical experiences with very ill older people can damage students' attitudes and thus influence their future career options (Stevens & Crouch, 1992, 1995).

However, findings of previous studies by other researchers in western countries concerning knowledge of ageing and attitudes toward the older people and nurses' demographic characteristics have been worrying and alarming (Herdman, 2002; Soderhamn *et al.*, 2001; Happell, 1999). Early, Kayser and Minnigerode (1975) pointed out that student nurses have developed stereotypes and misconceptions about older people and the study showed minimal interest in working at nursing homes caring for older people. Similar, Nolan (2000) notes that acute care setting obviously more positive view attracting in nursing than long care setting. Keller (1986) as well as Williams (1982) also found that nurses in long-term care institutions had more negative attitudes than other nurses. This views may be due to nurses in long term care institutions having greater contact with older people who fit the negative stereotypes (Palmore,1998). However, in review of the studies, contradictory evidence still gaps exists as whether health care professional hold negative or positive attitudes toward older people and specific older people care. Furthermore, the previous studies of attitudes which focus on simple behaviours or attitudinal items do not contribute to our understanding of the situations within which attitudes are expressed and future studies should not neglect to articulate evaluative ranking distinctions. Perhaps the most important general gap finding from these studies is that most people without training in gerontology such as nurses have many negative misconception about older people. Hence, Gerontology nursing education play an important role in the modelling of more positive attitude and increase knowledge toward older people as the studies suggested.

Currently in Saudi Arabia there is no research exploring whether or not clinical placements within educational programmes are preparing students for gerontological nursing, and in particular, no assessment of whether or not educational endeavours are

fostering an increased willingness in baccalaureate nursing students to work with the ageing population. Nor is there enough current research assessing educational effectiveness in equipping graduates with the skills needed to meet the needs of older Saudi people. Consequently, the main goal of this study is to explore the attitudes, knowledge, willingness and intentions of nursing students to work with older people, and to consider the effects of clinical nursing practice on nursing students' knowledge, attitudes, willingness and intentions/ work preferences towards the care of older people in the first year and the final (pre registration) year in three major university hospitals. The study also explores nursing faculty members' attitudes towards older people, their thoughts about gerontologic nursing education and the implications for the gerontology curriculum in baccalaureate nursing schools. Hence, this study will increase understanding of the nursing students' and faculty members' overall perceptions of gerontological education in Saudi Arabia and potentially enhance gerontological nursing education among nursing students by promoting such education as important within nursing schools in Saudi Arabia. I also hope to identify implications for future curriculum developments in gerontological education. This study is the first in the field of gerontology education to examine links between nursing students and their teachers in Saudi Arabia. To set the study in context, it is important to describe the current system of nurse education in Saudi Arabia.

1.3 Nursing education in Saudi Arabia

Nursing education in Saudi Arabia began in 1958 with the establishment of a health education institution for boys in Riyadh based on a 5-year contract between the Ministry of Health (MOH) and the World Health Organization after which the MOH assumed full responsibility for the institution, and 15 students were enrolled. At that time, the only major programme offered was health inspection. In 1960, two nursing schools for girls were established in Riyadh and Jeddah. The education programme for nurses included the curriculum of fifth and sixth elementary level and nursing assistant grade.

In late 1970, Gulf countries agreed to accept students with at least intermediate certificates. Nursing schools were converted into health institutes and the number

within the kingdom increased to 25. By 1993, the total number of health institutions was 42 (17 for boys and 25 for girls). Also in 1993, a higher standard of admission (high school diploma) was established to enter these health academies (Al-Osimy, 1994).

In Saudi Arabia, the MOH and the Ministry of Higher Education (MOHE) oversee nursing education. The MOH provides health institutions and intermediate colleges for male and female students, while the MOHE offers Bachelors' and Masters' Degrees in Nursing Science for female students. In 1973, the MOHE established higher education programmes in nursing. At King Saud University in Riyadh, under the supervision of the Applied Medical Science division, a department of nursing for women was established. In 1987, a graduate programme of nursing for women was opened in the same college that offered a Master of Science in Nursing. In the same year, a department of nursing for women was established at King Faisal University in Dammam, and a Bachelor of Science degree was offered at King Abdul Aziz University in Jeddah in 1976. Graduates of the baccalaureate programme are qualified to practice professional nursing in a variety of health care settings, and for entrance into a graduate education programme for clinical specialisation and functional areas. The programme faculty believes that learning is an internal process and is evidenced by changes in the behaviour of the individual (King Abdul Aziz University, 2001).

The curriculum at King Abdul Aziz University is a five-year programme leading to the degree of Bachelor of Science in Nursing, the BSN. Clinical placements for the programme are provided through arrangements with a variety of hospitals and other health care facilities for the purposes of accomplishing course objectives. Clinical practice is under the supervision of the university nursing faculty. The curriculum is based on concepts, principles and theories from various disciplines together with the nursing process. Through the nursing process, the student learns to establish priorities and learns present and future interventions in patient care. Significantly, Al-Osimy (1994) states:

"Nursing in Saudi Arabia is a holistic service profession which is sanctioned by society to meet the health needs of the population and is influenced by the changing need of the society. The practice of nursing encompasses the prevention of illness, the promotion, the maintenance

and restoration of health as well as the rehabilitation of the individual to his maximum potential. The foundation of professional nursing education and practice are based upon principles, theories and concepts from physical, biological and behavioural and the humanities".(p,59)

The philosophy of the undergraduate nursing programme supports the programme within the overall mission of the university. The nursing programme recognizes each human being's uniqueness of mind, body and spiritual being and is dedicated to caring for human beings at any point in the life cycle. The nursing curriculum prepares its graduates to care for human beings, with respect for their personal worth, dignity and feelings, and recognizes rights and responsibilities. Academic excellence is promoted by encouraging sound judgment and critical thinking through the integration of social, behavioural and biological sciences. The nursing programme believes that the concepts of human beings, the environment, health and nursing are essential components of a nursing curriculum (King Abdul Aziz University, 2001).

In Saudi Arabia, nursing education programs were developed to provide the knowledge, skills, attitudes and value of the role for those who have chosen to work in the nursing profession. With the continuous improvement and upgrading of nursing education and nursing practices, graduate education programmes in nursing have been developed in Saudi Arabia. The Saudi Universities welcome applications from female Saudi Nationals with the personal qualities, intelligence and motivation essential for the study of nursing in a university (Department of Nursing Bulletin, P.5). In this study, the participating universities offer nursing studies only to females; for that reason, all participants were female and the resulting limitations should be borne in mind.

Furthermore, with the progress of the medical sciences, nursing has occupied an important place among health services in Saudi Arabia. Similarly, Tumulty (2001) proposed that degrees in nursing are promising in terms of future careers in Saudi Arabia. Therefore, the delivery of nursing services in Saudi Arabia, in both governmental and private sectors, has recently become dependent on expatriate nurses from throughout the world. Alshahri (2002) reports that, at present, the health care system is mainly staffed by non-Saudi health care professionals, employed from

across the world. As a majority of the nurses have different training backgrounds and nationalities, there are obvious diversities in the nursing care provided by different institutions. In Saudi Arabia, Aldossary *et al* (2008) suggested that:

"The challenges for Saudi Arabia are increasing its proportion of indigenous nurses who will be able to deliver culturally appropriate high quality care and to share the Arabic language with their patients. Without this, it may prove difficult to deliver effective health education in Nursing work". (P128)

In fact, the reason for the shortage of Saudi female nurses is not due to avoidance of this profession, but due to the attrition rate of Saudi nurses, and all hospitals have complained of shortages of nurses (Al-Osimy, 1994). There is a need to examine and monitor the attrition rate of Saudi nurses to maintain an accurate and effective system of keeping records. However, Saudi Arabia has not yet effectively expanded its nursing workforce to meet the health care demands of the Saudi population compared with other countries, especially with regard to older people. Furthermore, El Sanabary (1993) reports that in the midst of rapid socio-economic change in Saudi Arabia, there are three development areas for female health care professionals: (1) the vast expansion of female education and the desire to provide culturally and female-appropriate occupations, (2) the rapid expansion of health care facilities and the government's commitment to train much-needed health workers, and (3) the heavy reliance on expatriate health personnel and the desire to replace them with Saudis (p.1332).

The current acute shortage of qualified Saudi nurses in the hospitals and health centres dictates an urgent review of the kingdom's present and future nursing training, especially in the older people care. Nevertheless, Miller-Rosser *et al* (2006) claim that Saudi women are slowly becoming employed as nurses and allied health workers, although Saudi females who select nursing as a future career face many obstacles, such as the poor image of such work in Saudi society. There is a lack of standard of nursing care due to a multinational workforce with different educational backgrounds; there is often no uniform system of nursing care in the kingdom. Furthermore, the training programme for nurses faces some problems in Saudi Arabia. There has always been a shortage of applicants, especially Saudi females, mainly because the role model of a nurse or a health assistant is not popular in Saudi society. In many

instances, office work is the path for promotion, which drains technical persons to administrative jobs. Furthermore, marriage frequently deters Saudi females from continuing their career. In the light of this, there was a shortage of nurse clinical tutors/instructors and that contributes to the poor continuing nursing education in the kingdom (Alosimy, 1994).

On the other hand, the future demand for health care workers to meet the needs of older people can be expected to grow appreciably in Saudi Arabia (Omer, 1997). The Kingdom urgently needs a research assessment or planning activity designed to provide information for a policy to increase the number of Saudi nurses. At present, the health care system in Saudi Arabia will have to adapt to the increasing proportion of older people by promoting the training of health care workers such as nurses in gerontology nursing. Nonetheless, the kingdom needs to increase its supply of Saudi nurses greatly, particularly to provide culturally competent care for the increasing number of older people. Alosimy (1994) states:

"Nurses are faced by the two major challenges in Saudi Arabia. The first is to help society clearly understand how the nurse's role has changed, and to communicate what her present role is. The second is to identify how nurses can improve their service, and how consumers can effectively help nurses clearly understand their actual/potential health needs. The immediate future of nursing offers substantive challenges". (p.77)

In conclusion, the current acute shortage of qualified Saudi nurses in hospitals and health centres dictates an urgent review of the kingdom's present and future nursing training, especially in the area of care for older people. Such training needs should be considered by the schools of nursing as a primary line to produce nurses. This should be the first priority in the planning of health development in Saudi Arabia.

The present study sought to explore the above in the context of Saudi Arabia. Before considering how this was undertaken, attention is now turned to specific aims and objectives that the study sought to address and the identification of a theoretical framework for the work.

1.4 Study Aims and objectives

The aims of this study are to explore the attitudes, knowledge, willingness, intentions and work preferences towards the care of older people among nursing students in the undergraduate nursing curricula in Saudi Arabia.

The more specific objectives are:

- 1) To gain understanding of nursing students' knowledge, attitudes, willingness and intentions/work preferences towards the care of older people in three major universities in the kingdom of Saudi Arabia at each of the five years of training.
- 2) To describe the nursing faculty members' attitudes towards older people.
- 3) To examine the relationships between the attitudes of the nursing faculty and students' attitudes toward the care of older people.
- 4) To compare the intentions of working with older people between Saudi & British nursing students.
- 5) To explore the work preferences among Saudi nursing students related to attitudes, willingness and intent to work with older adults and the reasons for selecting older people as their highest or lowest work preferences.
- 6) To determine the effects of 32 weeks clinical nursing practice on nursing students' knowledge, attitudes, willingness and intentions towards the care of older people in the first year and the internship year (pre-registration year) in three major university hospitals.
- 7) To identify the factors that might help to predict positive behavioural intentions to work with older people among Saudi nursing students.
- 8) To share the faculty's thoughts toward gerontologic nursing education and to draw implications for the gerontology curriculum in baccalaureate nursing schools.

In addressing these aims and objectives a specific theoretical/conceptual framework was selected, as outlined below.

1.5 Conceptual framework

This section describes the conceptual framework for this study, the definition and theories of attitude and their implications for nursing students' views toward older people. A framework is the conceptual underpinning of a study, and the terms 'conceptual framework', 'conceptual model' and 'theoretical framework' are often used interchangeably (Polit and Beck 2004). Central to this study is the concept of attitude and related ideas and therefore attention is paid to the emergence of work in this area. 'Attitude' is one of the essential building blocks of social psychology but, like most abstract terms in the English language, it has more than one meaning. Derived from the Latin *aptus*, and like its by-form, *aptitude*, it denotes a subjective or mental state of preparation for action (Fishbein, 1967, p. 3). Furthermore, the term 'attitude' has been used for many decades in sociology, since it was introduced in this context by Thomas and Znaniecki (1918) who defined attitude as a process of personal consciousness that verifies individual actions in the social world, such as feelings, tendencies, needs, ideas, fears, thoughts and interests. Later, Allport (1935) defined attitude as 'a mental and neural state of readiness, organized through experience, exercising directive or dynamic influence on the individual response to all objects and situations with which it is related' (p.810). Generally attitude is viewed as affective or evaluative in nature and is derived from individual beliefs about an object. Most people hold both positive and negative beliefs about objects: i.e., a person associates the object with both positive and negative attributes. Significantly, a person's attitude may be inferred from the overall feelings associated with a person's beliefs about an object. For example, in my study, if a person associates work with older people with mostly negative attributes, such as being boring and leading to low self esteem, his/her attitude is said to be negative.

One of the most frequently cited frameworks that have been applied to the study of student nurses' attitudes towards older people is that of Fishbein and Aizen (1975). They define attitudes as follows: 'Learned predispositions to respond in a consistently favourable or unfavourable way towards a given object, person or event, attitude corresponds to overall affect (negative or positive) associated with attributions made about the object' (p.253). Other factors that influence behavioural intentions (for example, to work with older people or not) include beliefs of a normative nature and perceived behaviour control. Consequently, and more recently, Fuson (2002) defined attitude as 'the probability of the occurrence of a defined behaviour or social action in a defined situation'. Thus, as noted previously, attitudes do not always predict behaviour (Dautscher, 1969), and indeed attitudes may change, for example, because new experiences have intervened or because different evaluations have become salient (McGuire and McGuire, 1991). Consequently, the relationship between attitudes and actual behaviour is contested. Some argue that the relationship is relatively weak with only about 10% of variance in behaviour being attributable to attitudes, while the remaining 90% relates to personal factors, individual perceptions or expected consequences (Wicker, 1969, Liska, 1975).

On the other hand, many studies have found evidence for a significant relationship between attitude and behaviour (Fendrich, 1967; Mann, 1959; Tittle and Hill, 1967). Not surprisingly, therefore, several studies have explored nurses' attitudes towards older people and many of these have produced ambiguous results with both positive and negative outcomes (Hweidi and Al Hassan, 2005; Hawk *et al* , 2001; Soderhamn *et al*, 2001; Brown, 1999; Sheffler, 1995; Hope, 1994; Wilhite and Johnson, 1976). Moreover, several conceptual frameworks and measures have been used to address a broad range of research questions relating to nursing students' attitudes toward older people, such as the Theory of Planned Behaviour (Fishbein and Ajzen, 1974), the Attitude Representation theory, the Bem Self-Perception Attitude Change theory and King's Conceptual Framework theory (1967). However, that most consistently applied is the work of Fishbein and Ajzen (1974), and this has been adopted in this study.

Ajzen and Fishbein first developed the Theory of Reasoned Action (TRA) in 1967, and this was expanded in the 1970s and 1980s and a new framework emerged that

was called the 'Theory of Planned Behaviour' (TPB – Ajzen 1991). The TPB provides the study with a conceptual framework where attitudes are related to, but not entirely predictive of, behaviour. Rather attitudes and behaviours are mediated by 'behavioural intentions'.

Behavioural intentions are considered to be more influential than attitudes in determining a specific behaviour, and as Ajzen (1991) noted, the TPB has three interlinked components, which collectively are more predictive of individual behavioural intentions. The first predictor is an individual's 'attitude', defined as their favourable or unfavourable evaluation of an object (for example, older people). The second predictor comprises 'subjective norms', which relate to an individual's motivation to comply with the expectations of others. The third factor is 'perceived behavioural control', which includes internal and external factors and is defined as an individual's belief about how easy or hard it will be to successfully perform a given action. External factors include environmental and situational influences, while internal factors include personal skills, knowledge, abilities and emotions. Thus a person's behavioural intention is viewed as a function of three factors: attitude toward the behaviour, subjective norms and perceived behavioural control. Ajzen's theory is significant for the care of older people because it suggests that strategies can be designed and implemented that may change behaviour towards older people by bringing about changes in behavioural intentions by addressing one or more elements of the theory, that is either attitudes, subjective norms and perceived behavioural control.

Significantly, the Theory of Planned Behaviour argues that we have to consider "multiple act criteria" and understand that many factors shape behaviour and these include the individual's attitudes towards the target behaviour, along with their evaluations of those outcomes. Moreover, the theory points out that subjective norms are the beliefs held by the individual about significant others' attitudes towards the behaviour. Subjective norms also incorporate the individual's motivation to comply with the views of such significant others. In the context of the present study, such significant others that may influence a student's ultimate desire to work with older people include their peers (i.e. fellow students), their educators and, as the literature review showed, particularly the nature of their clinical experiences. Perceived

behavioural control incorporates factors that the individual considers salient as to whether or not they can actually perform the behaviour. Thus, the Theory of Planned Behaviour (1975) views attitudes, subjective norms and perceived behavioural control as contributing to the formation of behavioural intentions, as shown in Figure 1.1.

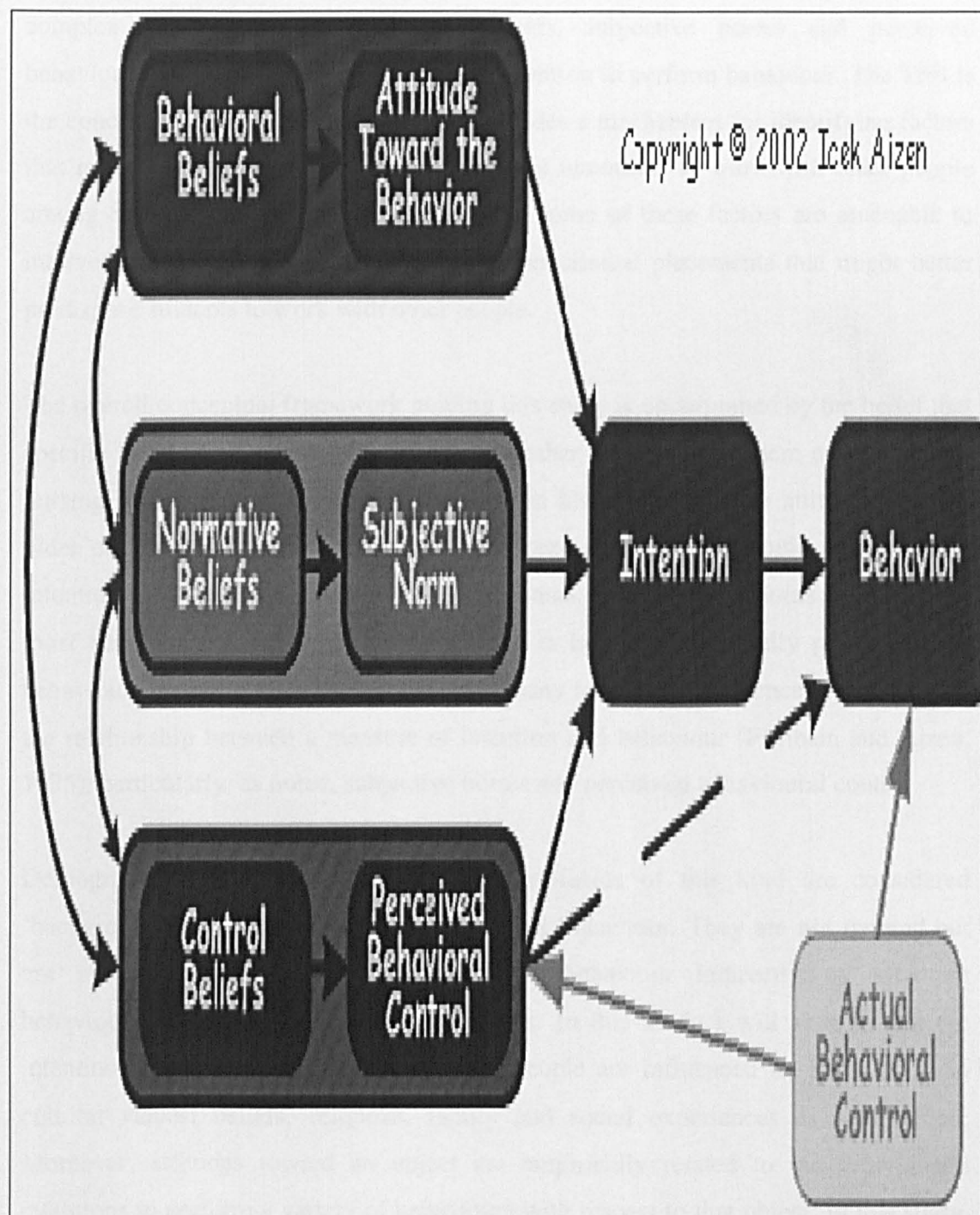


Figure 1.1: The Theory of Planned Behaviour considers attitudes, subjective norms and perceived behavioural control (Fishbein and Ajzen, 1975).

Fishbein and Ajzen's theory is based on the assumption that human behaviour is most often reasoned rather than illogical behaviour. The theory views a person's intention as the immediate determinant of action, with the determinants of intention being attitudes, social norms and perceived control. I used Fishbein and Ajzen's (1975) theory as the conceptual framework for this study because it highlights the potentially complex understanding of attitudes, beliefs, subjective norms and perceived behavioural control as the determinants of intention to perform behaviour. The TPB is the conceptual model for this study and provides a mechanism for identifying factors that might help to predict positive behavioural intentions to work with older people among Saudi nursing students. Importantly, some of these factors are amenable to interventions, for example, education or better clinical placements that might better predispose students to work with other people.

The overall conceptual framework guiding this study is underpinned by the belief that specific behaviours toward older people (whether to work with them or not) among nursing students can in part be predicted from knowledge of their attitudes towards older people and their intentions towards working with older people. Behavioural intentions are viewed as immediate determinants of actual behaviours, and because most behaviour is voluntary, the individual is believed to actually perform those behaviours he intends to perform, although many factors can influence the strength of the relationship between a measure of intention and behaviour (Fishbein and Ajzen, 1975), particularly, as noted, subjective norms and perceived behavioural control.

Demographic variables, values and other variables of this kind are considered 'background factors' in the Theory of Planned Behaviour. They are not ignored but are presumed to influence intentions and behaviour indirectly by affecting behavioural, normative and/or control beliefs. In this study I will assume that the intention of nursing students toward older people are influenced by Saudi Arabian cultural values, beliefs, religious, family and social experiences as background. Moreover, attitudes toward an object are empirically related to the individual's intentions to perform a variety of behaviours with respect to that object. In this study, I will assume that a relationship predicts the attitude and the set of behavioural intentions toward the care of older people, rather than some specific intention toward the object (Fishbein and Ajzen, 1975). This necessitates the choice of instruments that

measure a number of concepts including: students' attitudes towards working with older people; their willingness to work with older people; perceived behavioural control (PBC) and intentions to work with older people.

With the above considerations in mind the following section provides a justification for the instruments that were adopted in this study.

Students' attitudes toward older people were measured using an adapted version of Kogan's (1961) original Attitude Toward Old People scale. The questionnaire consisted of 32 items, or 16 pairs of positive and negative statements, concerning attitudes toward older adults. The questionnaire used a 5-point Likert-type scale ranging from 'strongly agree' to 'strongly disagree', with higher scores indicating less favourable attitudes. Fishbein and Aizen (1975) define attitudes as follows: 'Learned predispositions to respond in a consistently favourable or unfavourable way towards a given object, person or event, attitude corresponds to overall affect (negative or positive) associated with attributions made about the object' (p.253). I elected to use the modified Kogan's Attitudes Towards Old People scale because the ATOP scale demonstrates high content validity. Numerous other studies have used this scale to examine the attitudes of students toward older people (Hweidi & Hassan, 2005; Zakari, 2005; Hawk, 2001; Soderhamn *et al*, 2001; Brown, 1999; Sheffler, 1995; Hope, 1994; Wilhite and Johnson, 1976). Zakari (2005) used the modified Attitudes Towards Old People scale within a population of Saudi student nurses and it demonstrated acceptable reliability (Cronbach's alpha (0.74), and also acceptable face validity with Saudi students. This result indicates that the modified version has a greater acceptable internal consistency than the original scale, and is also in accordance with the culture and norms of the Saudi society. Therefore it has been used in this study. For each scale in this study, I examined the reliability and I found that each had a acceptable Cronbach's alpha result. These data are presented in section (3.5).

Willingness to work with older people comprises normative beliefs and motivation to comply which may lead to normative pressures on the individual, which Fishbein terms 'subjective norms'. In this study, subjective norms are determined by beliefs that specific referent individual or groups (for example peers, mentors, educators) approve of the behaviour and there is motivation to comply with these referents (Fishbein 1967). In this study, I used the modified "Willingness to Take Care of Older People" Inventory developed by Aday and Campbell in 1995 to examine the willingness to care for older people. I examined its reliability and I found an acceptable Cronbach's alpha of (0.74), and these data are presented in section (3.5). I elected to use this instrument because Cronbach's revealed a coefficient, indicating moderately acceptable internal consistency. Zakari (2005) used the modified "Willingness to Take Care of Older People" within a population of Saudi student nurses and it demonstrated acceptable reliability (Cronbach's alpha (0.75), and also acceptable face validity with Saudi students. It included 12 statements and focused on positive and negative aspects related to willingness to care for older people. Answers were arranged on a Likert-type scale, ranging from 1 (strongly agree) to 5 (strongly disagree), with 3 representing 'undecided or neutral'. Negative statements were reverse coded. The range of possible scores was between 12 and 60. A higher mean score indicates a greater willingness to take care of older people. Subjective norms (willingness to work with older people) and attitudes toward older people are regarded as the two major factors influencing behavioural intentions and actual behaviour in this study.

Perceived behavioural control (PBC) is a function of the perceived probability that certain control factors are present and these factors may promote or inhibit performance of behaviours (Fishbein 1967). Similarly, Ajzen and Madden (1986) defined PBC as "the persons' belief as how easy or difficult performance of the behaviour is likely to be" (P.457). In line with this, Conner and Norman (2005) noted that Perceived behavioural control (PBC) as a construct was intended to encompass perceptions of factors that were both internal (e.g. knowledge, skills, will power) and external (e.g. time availability, cooperation of others) to the individual. In essence Perceived behavioural control (PBC) incorporates factors that the individual considers

to be salient in determining whether or not they can actually perform the behaviour. These beliefs are assumed to be based upon various forms of previous experience with the behaviour. As no suitable scale existed, and there was not time to develop one, these factors were explored in this study by the use of open ended questions in the survey 'why did you choose working with older people as your first or least preferred work option'. These open ended questions were used to explore Saudi nursing students' career choices and preferences towards working with older people and constitute a major section of the qualitative chapter. A range of complex factors have been identified that provided insights into the array of influences that shape students' work preferences (See Chapter 5).

Ajzen and Fishbein (1980) see intention - a person's intent to perform or not to perform a behaviour - as the immediate determinant of an action. Fishbein and Ajzen (1975) said 'intentions may be viewed as special case of beliefs, in which the object is always the person himself and the attribute is always a behaviour' (p.12). The Theory of Planned Behaviour concludes that as general rule, the more favourable the attitude and subjective norms, and the greater the perceived control the stronger will be a person's intention to perform that behaviour. Consequently, this study will consider whether intentions to work with older people are influenced by nursing students' attitudes towards older people, subjective norms and perceived behaviour control. In order to tap into such intentions I elected to use the Intent to Work with Older People questionnaire that was developed and used by Nolan *et al* (2002) specifically to focus on the intention of student nurses to work with older people. This recent instrument is grounded in the experiences of nurses and students as Nolan *et al* (2002) identified a number of significant issues during interviews and focus groups with nurses and students and used these issues, together with a consideration of the relevant literature as the basis for this questionnaire. This provides it with good face and content validity. The questionnaire asks nursing students about their intentions regarding working with older people in three broad areas: working with older people in general, personal disposition to work with older people and perceived consequences of working with older people. Items were rated from 1 (strongly agree) to 5 (strongly disagree), with 3 representing 'undecided or neutral'. Negative statements were coded in reverse. For

this study, all 15 items from the original scale were translated into Arabic language and no content was changed. The reliability of the scale was checked and α was found to be greater than 0.7, indicating that the scale is reliable.

Having in this chapter given the background to the study, identified the aims and objectives to be addressed, background and significance to the study, described the current system of nurse education in Saudi Arabia, specified the overarching conceptual framework, and a justification for the instruments that were adopted in this study, the next chapter describes the literature review.

Chapter 2

Literature review

2.1 Introduction

The structure of this literature review is as follows. First, there is a discussion of the search strategy. Secondly, this section presents a review of attitudes towards and knowledge of older people and the ambivalence in nursing care of older people, where both positive and negative perspectives were examined. Thirdly, it reports on the research into clinical experiences with older people and its influence in shaping acceptance or non-acceptance of working with older people as a career option among nursing students. Finally, the potential of gerontological education programmes in the gerontology nursing curriculum and the role of nursing educators in influencing the knowledge and promoting positive attitudes for nursing students towards the growing aged population is identified.

2.2 The search strategy

The literature search used a comprehensive approach to interrogating a range of medical, social and nursing databases, as well as numerous other sources. These included:

1 Databases: Many health and nursing databases were searched including bibliographic databases such as CINAHL, Medline, AMED, ASSIA, British Nursing Index, Psyc INFO.

Main databases	
CINAHL	Cumulative index to nursing and allied health literature, providing authoritative coverage of literature related to these subjects. Part of the Ovid online service. Available on both University and NHS computer networks.
MEDLINE	The most extensive international health care database. Part of the Ovid online service. Available on both University and NHS computer networks.
AMED	Covers a selection of journals in complementary medicine, palliative care and allied health professions. Part of the Ovid online service. Available on both University and NHS computer networks.
ASSIA	Applied social sciences index and abstracts: a useful source for social issues particularly within the fields of mental health and learning disabilities. University network only.
British Nursing Index	British Nursing Index (BNI) covers over 220 British nursing and midwifery journals from 1994 onwards. RCN Journals database contains older material from 1985 - 1996 but is no longer updated. Available via the Web SPIRS service on the University
Psyc INFO	International literature in psychology, psychiatry and related fields. Particularly useful for mental health nursing. Available via WebSpirs on the University network and through the Ovid online service on the NHS

2.1: Main databases.

- 2 Grey literature:** NHS documents and articles written by key health organizations from UK Department of Health government publications. <http://www.nhs.uk/> and <http://www.dh.gov.uk/Home/fs/en>.

3 Healthcare organizations: Most health organizations. Examples of these include the WHO, the RCN and the NHS.

4 Nursing, midwifery and health visiting education: There is a wide range of interactive teaching and learning materials on older people's care. These can take many forms, from lecture notes, to tutorials, online quizzes and video clips of clinical procedures, such as the Teaching Gerontological Nursing CD from the Hartford Institute for Geriatric Nursing.

5 Search tools: These vary from search engines and subject gateways, such as Nursing Midwifery and Allied Professions (NMAP) which is a UK-based subject gateway, to quality nursing, midwifery and allied health – this is an online service providing access to the very best web resources for education and research .

The keywords used for searching included attitude, gerontology, geriatric, nursing education, clinical educators, ageism, older people, the elderly, ageing, aging, perception, ageing knowledge, intentions, willingness, clinical experience, clinical placement and nursing students from 1990-2008.

Initially I found a large number of references (2402) and to reduce this I combined older people with attitudes, knowledge and gerontology nursing and used Boolean operators and quotation marks (") such as "geriatric nursing" OR "gerontology nursing" and tried alternative words or synonyms (gerontology, geriatric) (attitude, perception) and varied the spelling of words such as the elderly, older people, ageing, aging, ageism to find more relevant information. This resulted in fewer, more relevant sources (573), with databases providing access to full text articles electronically, in addition to citations (bibliographic details of articles) and abstracts. The abstract for each item was scrutinized and keywords were identified. Material that was obviously not relevant to the study was eliminated.

The majority of the items were academic papers in journals, followed by books and reports. On retrieval, each reference was read independently and a set of notes made

identifying and summarizing key themes and issues. Finally comparisons were made within and between the references to explore conceptual links and achieve an element of synthesis relevant to my research topic.

Consequently, the aim of this chapter is to explore this literature review and it deals with findings under three headings:

- Students' attitudes towards older people and their intentions to work with them.
- Clinical experiences with older people and their influence in shaping acceptance or non-acceptance of working with older people as a career option among nursing students.
- The potential of gerontological education programmes to change nursing students' attitudes and work preferences toward older people, with an emphasis on nursing educators' roles in accomplishing any changes.

These are now considered sequentially in the order above.

2.3 Students' attitudes towards older people and their intention to work with them

Nurses' attitudes towards older people have been the subject of considerable research over recent years. Numerous studies have suggested that nursing students tend to have positive attitudes toward older adults and/or toward the care of older people (Hweidi and Alobeisat 2006; Zakari, 2005; Ryan and McCauley, 2004; McKinlay and Cowan 2003; Beard *et al*, 2004; Lookinland *et al*, 2002; Nolan *et al*, 2002; Lareau, 2000; Schechterly, 2000; Tennies-Moseley, 1995; Wei, 1995; Oglesby, 1992; Kuhn, 1990), although some studies have highlighted negative attitudes, which may affect the profession's ability to meet the growing demand for qualified nurses to care for older people (Herdman, 2002; Soderhamn *et al*, 2001; Hoffman, 2000; Happel, 1999; Steven and Crouch, 1998; Ebersol and Hess, 1997)). However, irrespective of their actual attitudes to older people, it seems that the majority of nurses do not actively choose gerontological nursing as a preferred career. Some of the main studies are summarised below.

Despite the extensive prior research, Zakari (2005) noted that relatively little is known about nursing students in baccalaureate nursing programmes with regard to the relationship between their knowledge of ageing, attitudes, willingness and intention to work with older people. Her study evaluated 506 nursing students' attitudes in Saudi Arabia toward older people; their willingness to take care of older people; their academic level of study; and their knowledge toward ageing. The study used hierarchical multiple linear regression, correlation (Bivariate) and Meta-Matrix analysis. The results noted a moderate intention to work with older people and an interest in and willingness to take care of them among nursing students and that such intentions toward working with older people were mainly predicted by their attitudes and willingness. The results also revealed that students generally lacked knowledge of ageing but held positive attitudes toward older people. However, the findings of this study are limited, as it did not explore the influence of clinical placements and clinical experiences with older people among nursing students.

Numerous previous studies have identified several factors that can affect attitudes toward older people and willingness to work with them, such as culture, ethnicity,

spirituality, education, personality traits, clinical experiences and past experiences with older people (Brown. *et al*, 2008 a,b; Hughes *et al*, 2008; Beard *et al*, 2004; Lookinland. *et al*, 2002; Callaghan *et al*, 1996; Hudgens, 1997). Callaghan *et al* (1996) claim that attitudes are influenced by many factors primarily related to socialization issues such as students' religious and cultural beliefs, as well as their personal values. In light of this, Lookinland *et al* (2002) argued that gerontology education should be provided to nurses in all settings regardless of ethnicity, especially to those with less education and those working in acute-inpatient settings. Their study used a comparative-descriptive design to explore the attitudes of African-American nurses toward older people and compared the attitudes of ethnic minority nurses working in hospital versus community settings. Findings from this study concluded that in general, African-American nurses expressed positive attitudes toward older people and registered nurses with masters' degrees held the most positive attitudes, while retired nurses and less educated nurses in acute-inpatient settings displayed the most negative attitudes. However, this study cannot be generalized to multi-ethnic groups, as it involved only nurses from the black ethnic group.

Hudgens (1997) examined the relationship between nursing students' attitudes, personal values, and past experiences with older people and their willingness to work with the older people after graduating. The sample (n=75) responded to written surveys and no statistically significant differences were found between nursing students' attitudes towards older people and their willingness to work with older people after graduation. However, the study showed that nursing students' personal values and past experiences were significantly correlated with their willingness to work with older people after graduating. There was no significant relationship between demographic variables such as age, gender and type of nursing programme and nursing students' attitudes, personal values and past experiences with older people.

It seems that cultural competence can play a major role in the attitudes of nursing students toward care of older people. Several studies have indicated that the general level of cultural competence may be a predictor of positive attitudes towards older people's care among student nurses. For example, Beard *et al* (2004) examined the attitudes of first-year students towards older people. Specifically, the study explored

the relationship of cultural competence to these attitudes, and the effects of demographic and work characteristics were also assessed. The study used a survey method for a sample of 41 female students: 82% of participants were white and the average age was 37 years (range 23-53). Attitudes towards older people were assessed using the Geriatric Attitudes Scale and cultural competence was assessed by using the Camphina-Bacote inventory. The study results showed that over half (58%) of participants had markedly positive attitudes towards older people. Chi-square analyses concluded that cultural competence was strongly associated with positive attitudes; 91% of those scoring as culturally competent had a positive attitude, as opposed to 45% of those not scoring as culturally competent. The study reported that culturally competent nurses were 12 times more likely to have a positive attitude towards older patients, controlling for race and age, in a logistic regression model ($p \leq 0.032$). There was no relationship between demographic factors, years of experience and attitudes. However, this research had limitations, as it used female students only, and more research is needed to determine whether, over time, cultural competency training would foster positive attitudes towards older people's care among both females and males.

Several studies have found a correlation between religious views and older people (Hweidi and Alobeisat, 2006; Zakari, 2005; Al-Shahri, 2002; Berenbaum, 2000). In fact, many cultural beliefs and norms, including those relating to the care of older people, are derived from a religious perspective. Conversely Monk and Kaye (1981) examined attitudes toward older people in relation to students' knowledge of religion. The study showed that religious students ($n=358$) lacked knowledge of ageing and held negative attitudes toward older people. The study criticized the negative attitude towards older people among religious students, who might be expected to have concern for the social and spiritual needs of others.

Several studies have suggested that nurses need continued education about the care of older people and found that generally, nurses do not pursue life-long learning to keep up-to-date on health issues, the needs of the public in general, and specific issues about older people. For example, Schechterly, (2000) investigated knowledge about the physical and behavioural aspects of ageing and attitudes toward older people among selected oncology registered nurses. Data were collected from 247 oncology

nurses and a three-part, 85-item questionnaire was used, consisting of Palmore's Facts on Ageing quiz (FAQ 1), Kogan's Attitudes Toward Old People (ATOP) Scale and a demographic section. The results showed that the knowledge level of the combined sample of oncology registered nurses was 60.5, indicating relatively limited knowledge of the physical and behavioural aspects of ageing, and they had positive attitudes toward older people. Surprisingly, nurses with more positive attitudes toward older people were less knowledgeable about the physical and behavioural aspects of ageing.

Ryan and McCauley (2004) analysed a descriptive survey to determine the knowledge base and attitudes of junior and senior baccalaureate nursing students toward older adults. A sample of 55 students was surveyed using two instruments: Palmore's revised Facts on Ageing Quiz 1 (FAQ I) and Kogan's ATOP Scale. The results showed that neither group had a positive attitude towards older people and both lacked knowledge about ageing. The research found no significant difference between the groups in this area.

On the other hand, several studies have found that intentions to work with older people are related to attitudes (McKinlay and Cowan, 2003; Mehta *et al*, 2000; Wei, 1995; Liou and Hsu, 1994). McKinlay and Cowan (2003) examined attitudes towards older people among 172 student nurses with a variety of clinical experiences who were undertaking a pre-registration nursing course. The study found that students' intentions toward working with older people were mainly predicted by their attitudes.

Pursey and Luker (1995) explored the difference between nurses' attitudes towards work with older people generally and their attitudes towards the individuals with whom they work. The study used 136 community nurses as a convenience sample and the result identified that whilst nurses did not have negative attitudes towards older individuals they did not wish to work with older people collectively. Similarly, Happell and Brooker (2001) raised the important question of 'Who will look after my grandmother?' in a review of attitudes of student nurses towards the care of older adults in Australia. The results of the study indicate that caring for older adults is considered the least popular area of practice for undergraduate nursing students due to negative views of work with older people.

Much of the research to date has suggested that the lack of desire to work with older people amongst students is due in part to negative attitudes toward older people themselves, and in part is due to the negative views of gerontological nursing as a career option. The influence of experience of older people is less clear. Dellasega and Curriero (1991) carried out a longitudinal study with a sample of 39 nursing students, whose attitudes were tested prior to and at the end of a clinical work experience in an institutional setting with older adults, and later after more extended experience with older adults. Their results demonstrated that nursing students preferred not to work with older adults, no matter what type of older adult experience they had undergone. This result was corroborated by Lusk *et al* (1995).

Based on much of the existing work, it seems that attitudes amongst nurses towards working with older adults tend to be negative (Courtney *et al*, 2000), and these negative attitudes towards older patients may result in nursing behaviours that harm these patients (Jacelon, 2002; Slevin, 1991). Haight *et al* (1994) asserted that decreased ageism would contribute to better nursing care and emphasized the importance of education in changing the attitudes of nurses toward older people, leading to the recruitment of more nurses to the specialty of gerontological nursing.

Importantly, some studies note a significant relationship between positive attitudes and the quality of care of older people, for example Walters (1994). This study concluded that negative attitudes amongst health care workers toward older people can affect both the quality services and the provision of health care. The study identified that health care workers with greater knowledge of ageing had more positive attitudes towards older people and showed that there can be a significant increase in knowledge and a significant reduction in negative attitudes following a continuing education programme. This is an issue that will be explored later.

As noted earlier, Happell and Brooker (2001) reported that in Australia, caring for older people is considered the least popular area of practice, and Brodaty *et al* (2003) claim that this is due to Australian gerontology nurses feeling dissatisfied because of high levels of stress, excessive workloads and a high turnover of staff. Elsewhere, Wells *et al* (2004) criticized gerontology nurses' lack of accurate knowledge of

ageing compared to that of other health professionals and noted that nurses expressed higher anxiety about ageing and experienced lower esteem in the profession even though they had positive attitudes towards older people. In addition, the study drew attention to the importance of an education strategy in gerontology nursing to change the attitudes of the profession toward older people suggesting that this could help to address nursing shortages in gerontology nursing in Australia.

Similar negative attitudes to older people have been found in several countries. In Finland nursing students do not choose care of the old people as a specialty career (Hirvonen *et al*, 2004). Such results raise important issues regarding why students are not interested in the older people care. The study measured students' attitudes towards older people and care of them by using Kogan's ATOP scale to find out if any change of attitudes could be seen during the study period and what factors could affect this change. Students' attitudes towards older people were positive at the beginning and at the end of the study. The respect and appreciation of older people was recognized but, according to the students, the quality of care varied in different units. A lack of staff and time meant that students felt that they were not able to use their professional skills to do their best for the older people. A Swedish study by Fagerberg *et al* (1997) evaluated gerontology education and found that student nurses with backgrounds in theoretical and clinical education rather than geriatric and gerontology nursing showed a preference for working in emergency care rather than in geriatric care after graduation from college, and that there is a correlation between working experience and the reasons for studies for career choice.

In the United Kingdom, Nolan *et al* (2002) carried out a survey of 718 student nurses and 855 qualified nursing practitioners producing a large volume of quantitative and qualitative data, which shed light on nurses' knowledge about the demography of ageing in the UK and their feelings and understanding about older people's needs and use of services. The results revealed that nurses lacked knowledge about the demography of ageing in the UK. However, they demonstrated that students tended to have positive attitudes towards older people in general and at the start of their training did not display negative attitudes to work with this group. However, in a detailed longitudinal element to the study, results showed that whilst students' prior

experience with older people influenced their attitude towards work with them, the most significant factor was the nature and quality of their clinical experience during their training, either as a formal part of their programme or during extra-curricular work experience. The influence of clinical experience will be considered in more detail later. The willingness of nursing students to work in gerontological nursing on qualification could have crucial consequences in the future. Many studies indicate that there is a crisis in health care, as student nurses do not want to work with this population, regardless of whether or not they have positive attitudes toward them (Bergland and Laerum, 2002; Kuhn, 1990). Kuhn (1990) conducted a nationwide survey of student nurses' attitudes toward ageing and their intent to work with older clients after graduation. The study sample of 305 student nurses was selected using a stratified random proportionate sampling method and the mailing yielded a response rate of 62%. The sample consisted mainly of white female students who were between the ages of 18 and 22. The highest percentage of students were freshmen and enrolled in baccalaureate degree programmes in nursing. The study results showed that student nurses had a positive attitude toward older people and males were more positive than females. On the other hand, the study found that student nurses did not want to work with patients/clients who were more than 65 years of age after graduation. In most cases, this was their least preferred group to work with. Their favourite was the younger age group of 0-17 years and the specialties of obstetrics and paediatrics.

Concerns about continuing education in gerontology, work satisfaction and working conditions are important factors in choosing to work with older people as a future career preference among student nurses. In a small-scale study Bergland and Laerum (2002) investigated why students choose/do not choose to pursue a career in gerontology nursing after graduation, and what changes students would want if they are to consider working within this field of nursing. The study found that two students preferred to work with older patients throughout, while five students changed their work preferences to gerontology nursing between their second and third year of training. The study explained that the major reasons for choosing gerontology nursing were interest in older people themselves and work satisfaction. On the other hand, the reasons for not choosing gerontology nursing were related to work conditions and their nursing training. The study recommended improvements in both general working conditions and conditions related to professional work satisfaction, both of

which were considered necessary by these students for them to choose such a career after graduation. However, the findings of this study are limited by the small number of participants. Nevertheless, the study by Nolan *et al* (2002, 2006), and particularly the work of Brown (2006) on a much larger sample found very similar results. In particular it highlighted the key role played by clinical placements and students exposure to high/low quality care for older people and their experience of positive/negative attitudes to gerontological nursing generally were key factors.

In summary, previous studies have painted a mixed picture, indicating that attitudes towards and knowledge of older people and gerontological nursing generally have both positive and negative elements but that attitudes towards older people and work with them may change, depending on the quality of clinical experiences. The influence of clinical experience is discussed in more detail in the following section.

2.4 The influence of clinical experiences with older people

Nursing education comprises two major elements, namely theory and clinical practice, and it has long been recognised that to improve teaching and learning processes, nursing schools should combine theory and practice (Rowland and Shoemake 1995). But, as noted above, clinical experiences with older people can potentially play a major part in determining whether students choose work with older people as a career option. For example, exposure to unpredictable clinical experiences with very ill older people can damage students' attitudes and thus influence their future career options (Stevens and Crouch, 1992, 1995).

Many studies have explored the effect of clinical placement on student nurses' attitudes and willingness to care for older people (Brown *et al*, 2008 a,b ; Tovin *et al*, 2002; Hoffman, 2000; Tennies-Moseley, 1995; Roberts-Rudd, 1984). For example, Tennies-Moseley (1995) found that in general, a clinical rotation that provides experience with older people in a clinical setting can develop a slightly more positive attitude toward older persons among student nurses. The study involved 52 students from a senior class (fourth semester) of registered nursing students at a community college offering an Associate Degree Registered Nursing Programme. Subsequently,

each student was assigned to do a 30-hour clinical rotation (two weeks) in an older people's care facility - a practicum providing a clinical experience. Having already successfully completed the third semester of the programme, including clinical rotations in medical-surgical, paediatric, obstetric and mental health nursing, the seniors were enrolled in a three-semester-hour theory class including an introduction to gerontology nursing, the effects of hospitalisation on older people and functional wellness. The statistical results suggest that student nurses were likely to acquire a more positive outlook dependent on the opportunities afforded in the gerontology area of nursing to experience positive interpersonal relationships and see the potential for achieving growth in their careers.

Roberts-Rudd (1984) evaluated a similar curricular unit in terms of its impact on students' attitudes toward older people, intentions to work in a nursing home, beliefs about older people and clinical experience in a nursing home. The study sample were 50 baccalaureate nursing students enrolled at university. Data were obtained prior to the start of the curriculum, at the conclusion of the curriculum and two months later. Kogan's ATOP Scale was used to measure changes in attitudes. Results showed that students' attitudes became more positive at the conclusion of the curriculum, there was a decline to pre-test levels two months later and the clinical site was found to be the most effective influence on attitudes. However, older people were still found to be the least preferred patient group, and students did not intend to work in nursing homes, nor in areas that were primarily for older patients. Furthermore, students' beliefs about older people in nursing homes were more negative than for other groups of older people. Similarly, Kayser and Minnigerode (1975) pointed out that in the past 30 years, student nurses have developed stereotypes and misconceptions about older people, and their study showed that nurses tended to have minimal interest in working in nursing homes caring for ill older people; they preferred to work with children and adult patients.

Significantly, Brown *et al* (2008 a,b) described the importance of the role of clinical placement experience in structuring student nurses' perceptions of gerontological nursing. The results of their study noted that students do not necessarily enter the nursing field with negative predispositions towards work with older adults, but that such negative views grow during their training, largely as a result of clinical

placements: for example, if student nurses are exposed to 'impoverished' environments of care where they witness poor standards of care and negative attitudes towards older people, then their views are more likely to be negative. In contrast, if they have experienced 'enriched' environments with high standards of care and positive staff role models, they are far more likely to view gerontological nursing in a positive way. The study recommended the use of the Senses Framework to clarify students' learning experiences in working with older people. Similarly, Ryan *et al* (2008) discussed the importance of using the Senses Framework to achieve relationship-centred dementia care services. The Senses Framework has been used extensively with older people, family carers, practitioners and student nurses in the context of caring relationships, demonstrating a good conceptual cohesion with concepts of care and service delivery. The potential role of the 'Senses' in describing the characteristics of an 'enriched' learning environment for students is highlighted by Brown *et al* (2008 a). Essentially the Senses Framework argues that all those in a given setting (patients, staff, students and families) should experience 'six senses' if good care is to result. The six senses are a Sense of:

- Security
- Belonging
- Continuity
- Purpose
- Achievement
- Significance

In other health care professions, such as physical therapy, studies have highlighted that negative experiences on clinical placements, such as in nursing homes, does affect students' vision about working with older people. Tovin *et al* (2002) analysed students' educational experiences of physical therapy with older people using focus group interviews, one-to-one interviews and journals. The results showed that students' negative experiences in nursing homes far outweighed their positive experiences, which led to negative beliefs and attitudes toward working in nursing homes and greatly affected students' intentions to seek work in other settings involving older people. The study suggested that to motivate and attract physical therapists to work in nursing home settings, educational interventions including

specially designed programmes should be developed to encourage them to work with older people.

Meanwhile, Hoffman (2000) examined the effect of caring for acutely ill older patients on student nurses' attitudes. Kogan's ATOP scale was administered to 40 first semester nursing students at the beginning of one semester and again at the end of that same semester, following completion of a clinical rotation involving the care of acutely ill older people. The study results showed that experiences where students are exposed to acutely ill older patients early in the nursing programme may result in the development of negative attitudes. The author suggested that gerontological nursing curricula should be evaluated and that the time at which they are taught should be changed to produce positive attitudes towards older people.

However, in contrast, some studies have found that clinical experiences in nursing homes can lead to greater confidence and acceptance when working with older people (Lareau, 2000; Rowland and Shoemake, 1995; Sheffler, 1998; Oglesby, 1992; Langland *et al*, 1986). Langland *et al* (1986) emphasised that initial clinical experiences in nursing homes could positively influence attitudes towards older people among nursing students. The study examined 50 nursing students before and after nursing home experiences using Kogan's Attitudes Toward Old People Scale (Kogan, 1961). It was found that clinical experience with older people changed students' attitudes, which became more positive. Similarly, Lareau (2000) examined the change in students' attitudes toward older people following an initial clinical nursing experience in a nursing home at a community college. Again, the Kogan ATOP Scale (Kogan, 1961) was used to assess students' attitudes. A pre-test was administered at the beginning of the course, prior to the nursing home experience, and a post-test was completed during the last week of the clinical experience. Scores from both tests were evaluated using a paired t-test. The results revealed an increase in positive attitudes toward older people following an initial clinical experience in a nursing home.

Oglesby (1992) examined the attitudes toward older patients of baccalaureate nursing students who had their first clinical experience in a nursing home, in comparison with the attitudes of baccalaureate nursing students who had their first clinical experience

in a hospital. The study used Kogan's ATOP Scale (1961) and in general, found that students' attitudes became more positive after clinical experiences with older patients. The study found a positive correlation between the age of the students and their willingness to work with older patients, and also revealed that students who had prior nursing home experience were more willing to work with older people after graduation.

More recently Bernardini *et al* (2008) evaluated attitudes toward older people among health sciences students in Spain. The aim of their study was to measure attitudes among final year pre-graduate students (n=472) in seven health care areas: medicine, occupational therapy, physiotherapy, nursing, psychology, social work and dentistry. The data were collected using the validated Spanish version of the Aged Semantic Differential (ASD) questionnaire. The results show that 54% of the students showed positive attitudes toward older people. However, nursing students held less positive attitudes toward older people, with female students having more positive attitudes than males. The study highlighted the importance of enhancing continuous interaction among healthy aged people and students from the above-named specialties during their specific training in the clinical placement.

Similarly, Hogstel (1988) found that community settings predicated more positive attitudes toward older people, because they are not very ill and nursing students can communicate and deal with them more easily. As regards relationships with healthy older people, the majority of studies have suggested that positive experiences of contact with healthy older people does engender positive attitudes toward older people (Gorelik *et al*, 2000; Roberts and Mosher-Ashley, 2000; Hawkins, 1996).

However, other studies provide differing results. For example, Sheffler (1995) found a positive relationship between knowledge and attitudes during gerontology courses for student nurses in a descriptive study that examined nursing students' attitudes towards and knowledge of older people from pre- and post- clinical experiences in two healthcare settings (nursing home and hospital). The study used Kogan's ATOP scale to measure attitudes and Palmore's Facts on Ageing Quiz to measure knowledge. The study indicated that students' attitudes towards older people improved after a

gerontology course regardless of clinical experiences. Similarly, findings in a study by Greenhill and Baker (1986) noted that clinical experience did not affect nursing students' knowledge of and attitudes toward older people. The study divided the baccalaureate degree student nurses into a control and an experimental group and used pre- and post-test Kogan's ATOP scale and Palmore's FAQ to measure attitudes and knowledge respectively. Half of the students were given experiences with healthy elderly people while the other group had no experiences. The result indicated that all nursing students, regardless of their experiences with older people, increased their knowledge and improved their attitudes toward older people.

Some studies stress both the role of clinical experience and education in changing nursing attitudes. For example, Franzen (1998) emphasised the importance of the curriculum and practice issues related to acquisition of ageing knowledge in gerontology nursing. The study explored how baccalaureate nursing students come to know and understand care for older adults from both practical and academic aspects. Others highlight the role played by prior personal experience. Gorelik *et al* (2002) found that gerontology students were more interested in ageing due to more frequent interaction with healthy older family members. Similarly, Hawkins (1996) claimed that of 420 undergraduate students, those who were in regular close contact with older relatives had more positive attitudes toward older people. In contrast, Mehta *et al* (2000) pointed out that living with older people did not correlate with students' attitudes toward older people. The more recent work of Brown *et al* (2008a, b) also highlights the role of prior experience in shaping students' attitudes.

In conclusion, many studies have examined the influence of various types of clinical experiences with older people on students' attitudes. Central to these is the clinical placement with older people being a positive and enriching experience, or alternatively a negative and discouraging experience. Consequently, the literature review has revealed that clinical experiences with older people serve as a focal point in developing students' concept of care for older people, especially in nursing homes. This can have a great impact on their career choices and preferences towards working with older people. On the other hand, other studies suggest that there can be a significant increase in knowledge and a significant reduction in negative attitudes to

older people following a continuing gerontological education programme. The next section of the literature review addresses and discusses this issue in more detail.

2.5 The influence of gerontological education on students' attitudes

In this section, the literature review considers the effects of education, early professional experience, and the impact of professional knowledge on changing student nurses' attitudes toward older people. It looks at how gerontology education may positively influence and lead to the acquisition of adequate knowledge to provide quality care for older people.

Some argue that nursing education often plays a large role in the development of nursing students' attitudes towards nursing in general and gerontology in particular (Prestia *et al*, 2008). Educators have attempted to improve these attitudes by introducing gerontology nursing content into the nursing curriculum. Also, the workplace can offer educational programmes to ensure supportive attitudes toward older people and appropriate knowledge of ageing. Certainly, previous studies underscore nurses' need to develop a positive philosophy toward ageing, contrary to the negative one held by society, particularly with regard to the special needs of frail older people (Chen, 2008; Koren *et al*, 2008; Snyder *et al*, 2008; Morris, 2007; Kim *et al*, 2004; Kirkpatrick and Brown, 2004; Wilkes and LeMiere, 2001; LeBlanc, 1995).

Koren *et al* (2008) propose that the growing number of older adults with multiple healthcare needs highlights the importance of teaching gerontological content to students in healthcare fields. Their study of 200 students investigated whether it is possible to effectively accomplish this educational goal, and considered students' attitudes and learning needs related to caring for older persons. The results emphasised the need to identify students' desire for more information on selected topics, such as supportive resources for older people and their caregivers. Wilkes and LeMiere (2001) examined the attitudes of 47 staff at an older people's care facility after gerontology education over a 12-month period. The study found that staff who attended the education sessions showed more positive attitudes toward older people.

Kirkpatrick and Brown (2004) reported that there is an urgent need to integrate innovative teaching strategies in gerontological education due to increases in the number of older people. Similarly, Morris (2007) points out the importance of continued evaluation of nursing curricula and evidence-based teaching-learning strategies, which should be integrated into the Bachelor of Science in Nursing curriculum in relation to older people.

LeBlanc (1995) suggests that attitudes of nursing students toward older people can be positively influenced by using teaching strategies that use simulation in conjunction with didactic and clinical experiences. The study evaluated effective teaching strategies, comparing lecture-discussion techniques with simulation in terms of their ability to change nursing students' attitudes toward older people. In addition, the independent variables of age and previous contact with older people were examined. The researcher used a demographic information form and Kogan's ATOP scale as a pre-test measure of attitudes toward older people for 98 associate degree nursing students. After eight weeks of clinical experience, the simulation group showed significantly more positive attitudes toward older people than the lecture-discussion group. Neither age nor previous contact with the older people was found to be significantly related to nursing students' attitudes toward older people.

Similarly, Chen (2008) emphasized that the rapid expansion of the aged population and its need for long-term care has become a significant issue in Taiwan, which needs to address education and training of manpower in the long term. She suggested using strategies such as the integration of Gerontology Nursing into the nursing curriculum to develop nursing students who are competent in terms of providing direct care and in accountability. Reflecting some of the findings on the influence of contact with older people, Kim *et al* (2004) suggested that education strategies that increase exposure to healthy older people to modify negative attitudes toward the older people among nursing students in Korea are important. Bridging the gap between gerontology and social work education was reported to be an important issue in the study of Snyder *et al* (2008). The study was implemented to explore the potential for a

four-week curriculum module in gerontological social work education to positively impact students' practice-related knowledge of ageing, as well as their attitudes toward older people and their interest in working with them. The study revealed a significant increase in students' knowledge of ageing. Similarly, Knapp and Stubblefield (1998) found that students' knowledge of ageing improved after successfully completing one course in gerontology.

Fajemilehin (2004) examined knowledge of ageing among 25 medical students and 41 diploma nursing students using the FAQ1. The study showed that participants had poor ageing knowledge due to the absence of a gerontology course. Similarly, Lee *et al* (2006) found that the 219 nursing students in their study lacked ageing knowledge due to the absence of gerontology education and previous experiences with older people. Wade (1999) has also commented on the importance of education programmes for promoting quality care of older people by developing positive attitudes to working with older people and decreasing ageism. She concluded that education programmes could significantly change preconceptions of nursing students toward older people, as did Aday and Campbell (1995).

To improve students' attitudes toward older people and increase their likelihood of selecting a career in care of older people, different types of educational interventions have been tried. Examples of these interventions include regular courses on ageing, clinical practice that leads to contact by students with older people, a combination of theory and clinical intervention, and special teaching techniques (Briscoe, 2004). Briscoe (2004) used a quasi-experiment design in two different universities for nursing students on a baccalaureate programme. The main purpose of the study was to determine which of two different methods of teaching gerontological nursing changed students' intentions to work with older adults. Furthermore, the study explored the role of nursing educators in influencing knowledge and promoting positive attitudes by nursing students toward the growing aged population. The results showed that negative stereotypes, misconceptions and attitudes toward the aged continue to be commonplace among nursing students. Although results revealed no differences in the participants' knowledge of ageing, some differences were found for negative and positive attitudes toward ageing.

The development, implementation and evaluation of appropriate interventions and continuing education programmes to increase students' nursing knowledge and improve attitudes in gerontology nursing is an important issue. Some studies highlight the value of teaching strategies in the clinical experience to change nursing attitudes. For example, Franzen (1998) emphasized the importance of the curriculum and practice issues in the acquisition of knowledge of ageing in gerontology nursing. The study explored how baccalaureate nursing students come to know and understand the specific requirements of care for older adults from both practical and academic aspects. The study showed that students came to know and understand care for older adults by constructing knowledge based on a variety of lived experiences within a variety of contexts. Experiences that both supported and challenged the students' development were evident in the findings. Furthermore, teaching strategies can play a major role in changing and influencing student nurses' attitudes towards and knowledge of older people. Many authors have contended that the method by which gerontological content is currently presented is problematic. For example, courses on ageing tend to be loaded with pathology- and disease-oriented content and contain little to no instruction about the normal physical, psychological and social ageing process (Palmore, 1988).

Many studies have examined various types of education programme to influence attitudes and knowledge, such as those that use multimedia to motivate students to select careers in care for the ageing. Miller (2004) proposed that gerontology design models should include the social and emotional issues of ageing to influence the attitudes and knowledge of the students, and that learning activities should include web-based assignments, case-study assessments and assessment of multimedia presentations. Coffey (2005) has emphasised the need to evaluate academic and clinical levels of support of nursing students in gerontological teaching and suggested using the assessment portfolio of clinical practices for gerontological nursing in nursing curriculum design to promote a link between theory and evidence-based practice as reflective and critical thinking to challenge and develop the practice of gerontological nursing. Brown's work (Brown *et al* 2008 a, b; Brown 2006) has stressed the importance of good mentor support during placements to help students

achieve learning that goes beyond their learning objectives.

Clearly nursing students need role models in their education and practice settings, such as nursing educators who are dedicated to the older population. As well as clinical mentors nursing educators in nursing colleges can play a major role in changing students' knowledge and attitudes using the gerontology course programme to encourage positive attitudes and foster willingness to work with older people and their families. In keeping with this, Hweidi and Alhassan (2005) asserted that nursing educators should put a greater emphasis on issues related to the care of the older person in their nursing curricula to promote quality care for this population. Similarly, Biddington (1996) suggested that a mix of theoretical and practical sessions in gerontology education could improve motivation, sense of worth, achievement and confidence for nursing educators. Many studies (Caris-Verhallen *et al*, 1999; Hartley *et al*, 1995; Kwan and Law 1994; Harrison and Novak 1988) support the influence of nurse educators as particularly important in gerontological nursing education. However, McLafferty and Morrison (2004) have criticised teachers' limited knowledge of gerontology, and claimed that they need to be more aware of their influence on student nurses' attitudes toward older people and avoid inadvertently conveying their negative attitudes toward ageing.

Tollett and Adamson (1982) surveyed senior students and nursing faculty members from four BSN programmes to examine their attitudes toward gerontological nursing. An analysis of a 16-items questionnaire developed by the researcher indicated that none of the 72 nursing faculty members indicated a preference for geriatric practice as compared to other speciality areas such as obstetric, psychiatric, paediatric, medical surgical or community health nursing. Tollett and Adamson concluded from this study that faculties' lack of interest in gerontology might negatively affect the inclusion of gerontology content and clinical experience in the BSN curriculum, as well as resulting in few students wishing to pursue a career in gerontological nursing.

Detherage (1987) studied 172 nursing faculty members who taught in one of three BSN programmes. This research noted that the faculty members who had received preparation in gerontology nursing other than their basic education program perceived the importance of this content more strongly than did faculty members who had not

received graduate level gerontology instruction. Detherage also found that faculty members who had attended a gerontological nursing activity, such as a class, conference, or workshops, were more perceptive and were convinced of the importance of this content in the BSN curriculum.

In order to strengthen the gerontological curriculum in nursing, the faculty involvement and enthusiasm must come first in interesting nurses in caring for older people. Hanson and Water's (1991) study noted that planned faculty development activities, especially those that lead to gerontological nursing credentials, have a positive change in suggestion toward presenting a clinical rotation in care services for older people as part of the associate degree nursing curriculum. The study showed that changes in faculty opinions about the preparation of nurses' roles in nursing homes constituted a finding that has implications for educators who wish to begin curriculum changes and include more content of gerontological nursing regardless of the reluctance and doubt on the part of some faculty members.

Students' observation of how others, such as staff nurses, deal with older people plays an important role in accepting the care of older people as a future career. In gerontological nursing, the influence of teachers and staff working with students in the teaching and clinical area is a particular concern and a very sensitive area if they have less than positive attitudes toward older people. The way in which nursing students perceive older adults will be influenced by the extent to which staff involved in teaching have an interest in older people (Wade, 1999). Similarly, Sheffler (1995) stated that there is a positive relationship between nursing students' attitudes and those of their instructors. Results from her study showed that attitudes of nursing students were more positive for students who had instructors in the clinical setting who demonstrated a positive interest in older adults.

McLafferty (2005) undertook focus group discussions to express attitude toward caring for older people with nursing lectures, registered nurses and student nurses. The discussions revealed that teachers are bringing into practice stereotypes and attitudes regarding ageing. She maintained that these attitudes will influence how both teachers and students perceive older adults and will affect how they interact with them in the practice setting. Furthermore, the influence of staff on students' attitudes toward

older adults is evidenced by findings from a study by McLafferty and Morrison (2004). Student nurses in this study reported that hospital staff are likely to deal with older adults and treat them as children. For the students who observed such behaviours, this stereotype of negative attitudes did not lead them to acquire a positive attitude toward ageing; neither did it foster a desire to work with older adults. Nursing students always see their teachers as role models; thus, the nursing faculty needs to be aware of their own attitudes and beliefs toward older people. They need to maintain more knowledge of ageing by offering continuing education courses that are specialized in this field. Furthermore, the nursing faculty should think seriously about the importance of the gerontological content to be included in nursing curriculum either in theory or in clinical training.

In conclusion, numerous studies in the literature review have proposed that nursing students tend to have positive attitudes toward older adults and/or toward the care of older people, although some have found negative attitudes, which may affect the profession's ability to meet the growing demand for qualified nurses to care for older people. Also, the literature highlights that experience of clinical placements with older people in nursing homes can be an ambivalent one, producing both positive and negative views, and that this can influence nursing students' career options with regard to older people. There is some evidence that gerontology nursing education can foster positive attitudes and increase students' knowledge about work with older people. However, the studies also shed light on the fact that gerontology nursing curricula need to develop planned teaching strategies for the care of older people, such as using evidence-based teaching and learning to promote more knowledge of ageing and to foster positive attitudes.

Previous studies have stressed the need for nursing education to focus on community settings with well older people rather than excluding ill older people, and argue that this may have a more pronounced effect in fostering favourable attitudes. It is also suggested that special considerations should be given to the knowledge and attitudes of nursing educators with emphasis on the importance of gerontological nursing education in nursing curricula, with the focus on changing the attitudes of nursing students to gaining positive knowledge and clinical experiences in gerontological care. All of the above appear essential if students are to choose gerontological nursing

as a career option.

2.6 Moving forward

The extensive prior literature on students' attitudes towards older people and their likelihood of selecting gerontological nursing as a career option has been considered under three broad headings:

- Students' general attitudes towards older people and working with them
- The influence of experience, especially clinical experience, of such attitudes
- The influence of education on such attitudes

No clear and unequivocal conclusions can be reached but it is apparent that a wide range of factors exert an influence, including, but not confined to:

- Students' values, beliefs, culture and religiosity;
- Students' prior experience of work with older people, or of contact with older people;
- Students' clinical experiences of work with older people and their exposure to 'enriched' or 'impoverished' care and attitudes;
- Students' educational experience of gerontological principles;
- Students' exposure to positive role models in both clinical and educational setting.

The next chapter considers the methodology employed during the study, identifies the research design the study is located, and identifies the more specific research questions and hypothesis that the thesis seeks to address.

Chapter 3

Methodology

3.1 Introduction

In this chapter, the methodological aspects of the study are described. The research design, research questions and hypothesis, psychometric testing of research instruments, reliability and validity, sampling procedures, ethical issues, data collection process and methods of data analysis are discussed.

3.2 Study Design

The aim of this study was to explore of the attitudes, knowledge, willingness, intentions and work preferences towards the care of older people among nursing students in the undergraduate nursing curricula at three nursing schools in Saudi Arabia.

I conducted this study through three interlinked phases:

- Phase I - A descriptive cross-sectional survey design with a qualitative component in the form of open-ended questions to explore of the attitudes, knowledge, willingness, intentions and work preferences towards the care of older people among nursing students in three major universities in the Kingdom of Saudi Arabia. To this end a survey questionnaire was given to 566 nursing students across three nursing schools.
- Phase II - A pre-/post-test was designed to examine the effect of 32 weeks' clinical experience working with older people in the hospital for first-year and final-year nursing students. At this stage, I determined whether there were changes in nursing students' knowledge, attitudes, willingness and intentions after 32 weeks' clinical experience in three university hospitals in the Kingdom of Saudi Arabia.

- Phase III – three focus groups and a survey were used with nursing faculty members at the three nursing schools to explore their attitudes towards the care of older people and the perceived status of gerontological nursing education in the undergraduate nursing curricula in Saudi Arabia.

As described in the introduction the instruments used in this study were the modified Kogan Attitudes Toward Old People Scale (ATOP), developed by Kogan in 1961 to measure attitudes toward older people (Kogan, 1961); the modified Facts on Ageing Quiz 2 (FAQ2), developed by Palmore in 1981 to examine health professionals' knowledge of ageing (Palmore, 1988); the modified Elderly Patient Care Inventory (EPCI), developed by Aday and Campbell in 1995, to examine the work preferences of nurses and their willingness to care for older people (Aday and Campbell), and the Intent to Work with Older People questionnaire, developed and used by Nolan *et al* (2002). Permission has been granted to use these instruments from the authors (Zakaria, 2005; Nolan *et al*, 2002). In addition, the questionnaire contained a section exploring nursing students' experiences of working with older people and demographic data. The instruments used in this study have been validated and shown to have accepted reliability results with a Saudi population section (3.5).

This study therefore adopted a quantitative and a qualitative approach, using a descriptive longitudinal survey with a comparative design to explore on nursing students' attitudes toward older people, their knowledge of ageing, their willingness to take care of older people and their preferences and intentions to work with older people, and the status of gerontology nursing education from the perspective of nursing educators. As noted in the conclusion to the preceding chapter, the study sought to address a series of research questions and their related hypotheses.

The single most important component of any study is the research question (Marks *et al*, 1988). A research question is the essence of what the researcher wants to know or the question they want to answer. Parahoo (1997, p.396) defines the research question as 'the broad question which is set at the start of a study'. The centrality of the research question to the whole research process is outlined by Rees (1997), who suggests that:

"Research consists of extending knowledge and understanding through a carefully structured systematic process of collection of information which answers specific questions in a way that is objective and as accurate as possible" (p.8).

This study examined the following questions and hypotheses:

1. What is the knowledge of ageing held by Saudi nursing students at five different academic levels?
2. What are the nursing students' attitudes toward older people, their willingness to take care of older people and their intentions toward the care of older people at five different academic levels in three universities in the kingdom?
3. What are the relationships among attitudes of nursing students toward older people, their willingness to take care of older people and their intentions to work with older people at five different academic levels in three universities in the kingdom of Saudi Arabia?
4. How are age group, care experience and work preferences among Saudi nursing students related to attitudes, willingness and intent to work with older adults as their highest or lowest work preferences after graduation?
5. What are Saudi nursing students' reasons for selecting older people as their highest or lowest work preferences?
6. What are the attitudes of nursing faculty members towards the care of older people and do they correlate with their nursing students' attitudes?
7. There is any relationship between nursing students' attitudes and willingness to work with older people in their religious beliefs?
8. What are the intentions of working with older people between Saudi & British nursing students'?

9. What are nursing faculty members' views and recommendations toward teaching gerontological nursing in undergraduate nursing curricula?

Research Hypotheses

1. There is a significant difference in knowledge about ageing before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (alternative hypothesis).
2. There is no significant difference in knowledge about ageing before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (null hypothesis).
3. There is a significant difference in attitudes toward older people before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (alternative hypothesis).
4. There is no significant difference in attitudes toward older people before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (null hypothesis).
5. There is a significant difference in willingness to work with older people in nursing before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (alternative hypothesis).
6. There is no significant difference in willingness to work with older people in nursing before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (null hypothesis).
7. There is a significant difference in intent toward the care of older people before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (alternative hypothesis).
8. There is no significant difference in intent toward the care of older people before and after nursing students have completed 32 weeks' clinical experience caring for older people in a hospital setting (null hypothesis).

The way in which the study was operationalised as illustrated in the table below.

Description	Stage I	Stage II	Stage III
Aim	To explore nursing students' attitudes toward older people, their knowledge of aging, their willingness to take care of older people and their intentions and preferences toward the care of older people at four different academic levels.	To examine the effect of 32 weeks' clinical experience working with older people in the hospital.	To describe the nursing faculty members' attitudes towards older people, and their willingness and commitment toward teaching gerontologic nursing.
Method	Descriptive survey questionnaire.	Descriptive longitudinal study: survey questionnaire.	A survey questionnaire and three focus groups.
Setting	I conducted this study in the three nursing schools at major universities in three cities in Saudi Arabia: Western University in Jeddah, Central University in Riyadh and Eastern University in Dammam. Three days per week the questionnaires were handed out in classrooms after explaining the importance of the study to nursing professionals in the study.		
Sample	A survey questionnaire was given to 769 nursing students at five different academic levels in three nursing schools.	232 students from first year and pre-registration nursing students on identical baccalaureate nursing programs in three universities.	173 nursing faculties in three nursing schools and three focus groups, with each group containing 6-8 members.
Data collection	The Modified Kogan Attitudes Toward Old People Scale (ATOP); the Modified Facts on Ageing Quiz 2 (FAQ2); the Modified Elderly Patient Care Inventory (EPCI), and the Intent to Work with Older People scale.	The Modified Kogan Attitudes Toward Old People Scale (ATOP); the Modified Facts on Ageing Quiz 2 (FAQ2); the Modified Elderly Patient Care Inventory (EPCI), and the Intent to Work with Older People scale	The Modified Kogan Attitudes Toward Old People Scale (ATOP)/ focus groups.
Data analysis	Data were analysed by using the statistical package SPSS version 15 to derive descriptive and inferential analysis.		SPSS descriptive and inferential analysis/ content analysis for focus groups and open-ended questions.

Table 3.1: Method of the study

3.2.1 Mixed method

As noted above, in addressing these aims, the study used a quantitative and a qualitative approach and employed a range of research instruments, the rationale for which has already been briefly described in the introductory chapter and will be elaborated upon shortly. However, in addition the student questionnaire also had open-ended elements to allow respondents to elaborate on certain issues and focus groups were used with faculty staff to explore their perceptions of gerontological nursing in greater depth. The study might therefore be said to have used a mixed method design.

Considering the multiple aspects and factors which have an impact on the care of older people from nursing students' and their teachers' perspectives, a single design method for this PhD study would not have been adequate to meet the study's aim and objectives and consequently to answer the research questions. Therefore this study adopts a mixed methods design comprising quantitative and a qualitative approaches, using a descriptive longitudinal survey with a comparative design to explore nursing students' attitudes toward older people, their knowledge of ageing, their willingness to take care of older people and their preferences and intentions to work with older people and focus groups to explore the status of gerontological nursing education from the perspective of nursing educators.

As Parahoo (2006) points out, mixed-method studies in nursing, health and social research are on the increase and are well accepted. Similarly, Andrew and Halcomb (2009) state that in the recent scientific literature there has been a steady increase in the number of mixed method approaches used and that there should be an increase in the teaching of these approaches as part of the curricula in research method courses. Mixed method was developed as a way of combining traditional research methods and it attempts to overcome the deficiencies and bias that can occur when using a single method (Duffy, 1987; Mitchell, 1986).

In this study, I used mixed methods to answer a broader and more complete range of research questions from nursing students' and their teachers' perspectives because I

felt that confining myself to a single method or approach would not allow me to achieve my goals. In the mixed-methods design format, the researcher brings together approaches that include both the quantitative and qualitative formats (Creswell, 1999). In the light of this, Tashakkori and Teddlie (2003) comment that many different terms are used for this approach, such as integrating, synthesis, quantitative and qualitative methods, multi-method and multi-methodology approach, but that recent writings tend to use the term 'Mixed methods'. This mixed method approach adds insights and understanding to the research topic that might be missed when only a single method is used. For example, in this study, the data obtained from the survey and from nursing teachers in focus groups were interpreted within the context of group dynamics. Similarly, Morgan (1998) notes:

"It is tempting to believe that research projects that combine the strengths of two or more methods will produce more than those same methods could offer in isolation. This possibility is even more appealing when combining qualitative and quantitative methods because this combination maximizes the ability to bring different strengths together in the same research projects" (p. 362).

The quantitative–qualitative debate has been, to some extent, about the feasibility, benefits, limitations and implications of combining more than one method in the same study. O’Cathain *et al* (2007) address this issue in the field of health, since another important question in drawing conclusions about the value of mixed methods is that of the yield from this approach. They emphasise that a mixed-methods approach has the ability to produce unique knowledge without the limits that would arise if using qualitative and quantitative approaches independently. In this study, a combination of methods can give a fuller and more accurate picture of gerontology education at nursing schools and elaborate on the focus of care of older people in Saudi Arabia. Significantly, a mixed-methods study enabled me to address the many components of this study, as is recommended by numerous researchers in this field (Howeidi & Al obeisant, 2006; Howeidi & Al Hassan, 2005; Zakaria 2005; Beardet al, 2004; Ryan and McCauley, 2004; McKinlay and Cowan, 2003; Herdman, 2002; Lookinland, 2002; Nolan *et al.*, 2002; Soderhamn *et al.* 2001; Hoffman 2000; LaReau, 2000; Schechterly, 2000; Happel 1999; Stevens and Crouch, 1998; Ebersol and Hess, 1997;

Tennies, 1995; Wei, 1995; Oglesby, 1992; Kuhn, 1990).

The mixed method approach in this study seeks complementarity between quantitative data, primarily data from the survey, and qualitative data from the survey and the focus groups discussions in order to provide illustrations and clarifications that lead to a better understanding of the care of older people from the perspectives of nursing students and their teachers in Saudi Arabia. In one sense, this study has shown how qualitative data can be helpful in infusing some deeper meaning into quantitative numerical findings. Significantly, Creswell (2003) and Tashakkori and Teddlie (2003) have asserted that it is feasible and possible to integrate paradigms by creating achievable mixed-method studies.

Creswell (2003) points out that one method may be more or less 'dominant' and 'less dominant' features of a study. In this study, the principle method is the quantitative approach, using survey questionnaires with nursing students as well as their teachers; the corresponding qualitative approach comprises open questions on the student questionnaire and a focus group discussion with nursing teachers, used as a complementary method. In this design, I collected both quantitative and qualitative forms of data at the same time and then integrated the information in the interpretation of the overall results. In this study I used a concurrent procedure, whereby different data collection methods were implemented simultaneously. Creswell (2003) points out that in concurrent procedures in mixed-method approaches, the data are gathered at the same time within a larger data collection procedure to analyse different questions or levels of units in an organization

Creswell (2003) offers the following approach to Concurrent procedure, which was used in this study:

"Concurrent procedures, in which the researcher converges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. In this design, the investigator collects both forms of data at the interpretation of the overall result. Also, in this design, the researcher nests one form of data within another, larger data collection procedure in order to analyze different questions or level of units in an organization".(P,16).

Thus the approaches used in this study were designed to address the research questions and proved valuable in this context despite a number of challenges. The inherent challenges that I found in this mixed methods approach were the need for extensive data collection, greater time scales, analysis of both quantitative and qualitative data and the need to be familiar with the traditions of a number of methodological perspectives.

The ways in which these varying methods were applied is considered in the next section.

3.2.2 Survey method

The survey method was chosen for nursing students in the study to explore attitudes, knowledge, willingness, intentions and work preferences towards the care of older people among nursing students in three major universities in the Kingdom of Saudi Arabia. To this end, a survey questionnaire was given to 566 nursing students across three nursing schools., Seaman (1987) notes that survey research dates back to the 1930s, when Gallup and Roper used this mode of inquiry with statistical analysis to gather data. Bowling (2004) explains that the aim of the survey is to measure attitudes, knowledge and behaviour and to collect as much correct and precise information as possible. Fink (2002) and Creswell (1994) express the view that surveys should have objectives prior to their design and that the way to generate these objectives is to hold focus groups. The survey method was also recommended by the fact that the size of the sample was considerable and the distances involved were great. Fink (2002) and Oppenheim's definitions of surveys were appropriate for this study, as opinions and attitudes to skill acquisition needed to be explored and measurement of these opinions and attitudes was required. Attitudes and opinions were expressed more readily than with questionnaires, trends and patterns were identified easily and areas not considered initially were brought to light by the participants. One advantage of the survey method is that it is highly confidential, allowing anonymity to be maintained; it can also gather extensive quantities of information from large numbers of people over wide geographical areas (Parahoo 2006). For example, Nolan *et al* (2002) carried out a survey of 718 student nurses and 855 qualified nursing practitioners to produce a large volume of quantitative and qualitative data, which shed light on nurses' knowledge about the demography of

ageing in the UK and their feelings and understanding about older people's needs and use of services. I will explore in more detail the study instruments in the next section (3.3) of this methodology chapter.

3.3.3 Focus group method

To strengthen research findings in gerontological education, members of the nursing faculties were engaged: this is the first time in Saudi Arabia that research has listened to their voices and examined their commitments toward gerontology education. Hanson and Waters (1991) point out the faculty involvement in education must come first because the nursing faculty is the most significant role model for modelling the specific professional values of students (Caris Verhallen *et al.*, 1999; Hartley *et al.*, 1995; Kwan and Law, 1994; Harrison & Novak, 1988). For that reason, in this study, a focus group was used as the qualitative method, with nursing teachers sharing their thoughts on gerontology education.

Furthermore, the focus group in this study was anticipated to play an important role in achieving the aim of this research, namely, to fill the gap and build bridges in nursing education between nursing teachers and students in order to improve gerontology teaching in Saudi Arabia. Furthermore, focus groups can provide major insights into attitudes, beliefs and opinions. Gray-Vicker (1993) promotes focus groups as useful in gerontological nursing and also as a method of collecting data from visually impaired older adults.

On the other hand, the rationale for the use of qualitative methods in this study was to provide an exploratory base to understand the care of older people from teachers' perspectives. Focus groups were conducted with nursing teachers to explore the perceived status of gerontological nursing education in the undergraduate nursing curricula in Saudi Arabia. Bowling (1997) states that focus groups are unstructured interviews with small groups of people who interact with each other and with the group leader. The focus groups in this study were held at the university, at the campus where the nursing lecturers were based. Morgan (1996) proposes that focus groups can also be combined with surveys, as shown in this study. The researcher realised that the focus group discussions used in this study would be useful in helping to interpret the findings from the quantitative approach, to give meaning to the numbers.

The focus groups process will be discussed in greater detail in the sub-section (3.8.2) from this chapter.

3.3 Psychometrics of Study Instruments

The instruments used in this study are the modified Kogan Attitudes Toward Old People Scale (ATOP), developed by Kogan in 1961 to measure students' attitudes toward older people; the modified Facts on Ageing 2 (FAQ2), developed by Palmore in 1988 to examine health professionals' knowledge of ageing, the Elderly Patient Care Inventory (EPCI), developed by Aday and Campbell in 1995 to examine nurses' work preferences towards caring for older people and the Intent to Work with Older People scale (Nolan *et al*, 2002). Permission has been granted to use these instruments from the authors (Zakari, 2005; Nolan *et al*, 2002). To test the psychometrics of these instruments, I assessed their validity and reliability and conducted a pilot study of the modified instruments before administering the final questionnaires. Furthermore, content validity was obtained through examination by a bilingual panel (Arabic and English) of twelve experts, recruited to establish the content validity of the instruments. The panel consisted of experts in the fields of Gerontology, Geriatrics, Nursing, Medicine, Education and Research. It included faculty members from three universities and consultants from the Ministry of Health in Saudi Arabia.

3.3.1 Attitudes Toward Older People (ATOP) Scale

Attitude scales are questionnaires commonly used in survey research (Tashakkori & Teddlie, 1998). The Attitudes Toward Old People scale (ATOP: Kogan, 1961) was used in this study to examine the attitudes of nursing students and teachers toward older people. Henderson *et al* (1987) argue that measuring attitudes is a complex and challenging task for researchers and claim that attitudes are in fact not something we can examine and measure. However, to address this challenging task, I conducted a literature review and explored several instruments for the measurement of attitudes towards older people. These included the Ageing Semantic Differential scale; the Tuckman Lorge Attitude Toward Old People scale; The Ageing Opinion Survey; Oberleder's scale; Palmore's Facts on Ageing Quiz and, Kogan's Attitudes Toward Old People scale (Henderson *et al*, 1987; Mueller, 1986; Oberleder, 1982; Monk and Kay, 1981; Kafer *et al.*, 1980; Tuckman & Lorge, 1953). The justification for the

selection of Kogan's Attitudes Toward Old People scale will be explained below.

According to Mueller (1986), the Ageing Semantic Differential Scale (ASD), based on Osgood's *et al* (1957) work, was not initially designed to measure attitudes but to measure the meaning of an object. Henderson *et al* (1987) argue that the ASD yields only general superficial information. Furthermore, Monk and Kay (1981) used the Ageing Semantic Differential scale to evaluate the meanings of attitudes toward older people and not to examine the attitude itself, which is the aim in this study. Additionally, the reliability and validity of these instruments have not been examined; hence, I excluded this measurement scale from the current research.

The second scale considered was the Tuckman Lorge Attitude Toward Old People scale, which consists of 137 items with 'yes' or 'no' responses (Tuckman and Lorge, 1953). I decided not to use this scale because of its length and the time that participants would have taken to complete it. The third instrument was the Ageing Opinion Survey (Kafer *et al*, 1980), which includes three subscales. These subscales measure personal anxiety toward older people, which is not relevant to this study. A fourth scale, the Oberleder scale (Oberleder, 1982), contains 25 items and has no reported reliability and validity data: for that reason, it was not considered suitable for use in this study. Palmore's Facts on Ageing scale has been used in several studies to measure attitudes toward older people (Doka, 1986; Hannon, 1980). However, Palmore himself states that the Facts on Ageing scale is not suitable to measure attitudes toward older people and he prefers to use the Kogan scale (Palmore, 1998):

"The Kogan Attitude Toward Old People Scale (Kogan, 1961) was also administered before and after the course, and it showed a significant change toward more favourable attitudes. This indicates that the Kogan Scale is a more sensitive measure of attitudes than are the FAQ1 bias scores" (Palmore 1990, p.54).

I considered several tools before deciding to use Kogan's (1961) Attitudes Towards Old People Scale to measure the attitudes of nursing students toward older people in this study. The scale measures the affective attitude component towards old people and consists of 16 matched positive-negative paired items with five response categories for each item, ranging from 'strongly agree' to 'strongly disagree'. The negative statements are coded in the reverse and Kogan (1961) stated that:

"Positively and negatively worded versions of the OP scale were significantly correlated in the content direction, and scale reliabilities were generally satisfactory. In addition, significant relationships that

could not be attributed to response set effects were found between OP scale scores and other attitudinal and personality variables” (p.161)

Interestingly, there is a debate about the fact that this scale is designed for the measurement of attitudes toward older people, not older patients. Penner *et al* (1984) claimed that nurses may have positive attitudes towards older people in general, but their attitudes towards older patients might be different, and even more negative.

Additionally, the ATOP scale has been found to have acceptable psychometric properties. I also elected to use a modified version of the ATOP scale, as it is considered to take account of the Saudi culture (Zakari, 2005). The measure was scored using a Likert scale. Furthermore, the ATOP scale has been used for faculty members. Sechrist and Pravikoff (2001) report that Likert scales are suitable to measure attitudes, beliefs, opinions, values and views. According to Tashakkori and Teddlie (1998), Likert-type scales ask the respondents to express their degree of agreement/disagreement using response scales, usually consisting of 4 or 5 options (strongly agree, agree, disagree or strong disagree, with or without a neutral option (see appendix A). Kogan (1961) stated that:

“The use of matched positive-negative item pairs permitted a test of the extent to which response set effects permeate the scales. Correlations between positive and negative scales were significant in the direction of logical consistency of response. In addition, all correlations between the positive and negative members of specific item pairs were in the logically consistent direction, the large majority significantly so” (p.53).

Significantly, odd-even reliability, using the Spearman-Brown prophecy formula, was tested in three separate studies and achieved reliability coefficients of 0.76, 0.73 and 0.83 for the Old Person Negative Scale. For the Old Person Positive Scale, the results were 0.77, 0.66 and 0.73. Intercorrelation of positive and negative scales ranged from 0.46 to 0.52 (Kogan, 1961).

3.3.2 Facts on Ageing Quiz 2

Students’ knowledge of ageing was examined in this study using the modified Facts on Ageing Quiz 2 (FAQ2), developed by Palmore in 1981. Multiple studies have been conducted using Palmore’s test on ageing knowledge since the appearance of the FAQ2 in 1981 (Zakari, 2005; MacDowell *et al* , 1999; Rodriguez & Thomson, 1998; Tierney *et al* , 1998; Tomson & Burke, 1998; Edwards & Aldous, 1996; Lusk *et al*,

1995; Sheffler, 1995; Huber *et al*, 1992; Timms & Fallat, 1996). The original FAQ2 consists of 25 true-false statements, which measure knowledge related to basic physical, psychological and social facts on ageing. It reveals common misconceptions about ageing and indirectly measures bias towards older people. In addition, the instrument has face validity, as answers for each item have been validated by statistical or empirical evidence (Palmore, 1988).

The greatest risk in a true-false test is that the respondent will guess at an answer, reasoning that they have a 50% chance of guessing the correct answer (Harris and Changas, 1994). Although conversion of the FAQ2 from a true-false to a multiple-choice format requires extra space and time, it would reduce the chances of respondents guessing the correct answers to questions. To help alleviate the problem of guessing, Harris and Changas (1994) modified the FAQ2 to a multiple-choice format. According to Palmore (1981), the usual tests for reliability are not appropriate for these quizzes because their primary purpose is to determine whether a statement about ageing is true or false. It is thought that the inter-item correlation tends to be low because the items represent many different dimensions of knowledge on ageing, including physical psychological, economic and social factors (Palmore, 1981). In addition, the multiple-choice version increased the chances that a score accurately represented the knowledge level of a respondent by decreasing the amount of guessing. Palmore (1977, 1988) also claimed that test-retest reliability is high but recognized that item to total reliability is low because items test different ageing domains. Lusk *et al* (1995) testified a Cronbach's alpha coefficient of 0.45 for the FAQ. According to Palmore (1977, 1988), on average, undergraduate students score 14 (56%) and nurses in practice score 16.5 (66%).

3.3.3 Willingness to take care of older people

The original Elderly Patient Care Inventory questionnaire rating scale was developed by Aday and Campbell (1995) to measure the willingness of nursing students to care for older people. In this research paper the authors use a quantitative approach with an experimental pre-/post test design used to explore the effects of a gerontology nursing curriculum on a group of baccalaureate nursing students. Pre-test questionnaires were distributed at the beginning of the junior year. The post-test

questionnaire was administered at the conclusion of the nursing curriculum, near the end of the senior year. Furthermore, qualitative statements collected in this research, via a questionnaire on work preference, provide a better understanding as to why some prospective nursing students choose to work with geriatric patients where others resist. The researchers used the Cronbach Alpha procedure to evaluate the reliability of the modification of the Perception of Ageing and Older People Inventory (PAEI) to measure nursing students' attitudes toward older people and the Elderly Patient Care Inventory (EPCI) to measure the willingness of nursing students toward caring for older people. The resulting coefficient was 0.8104 for the EPCI, indicating a high degree of internal consistency for the scale. Cronbach's Alpha procedure revealed a coefficient of 0.7053 for EPCI, indicating a moderately strong internal consistency. Additionally, the results revealed a significant relationship ($r=0.62$, $p < 0.001$) between attitude toward the older people (PAEI) and willingness to care for older people (EPCI). In this study, I used the modified "Willingness to Take Care of Older People" Inventory. It included 12 statements and focused on positive and negative aspects related to willingness to care for older people. Answers were arranged on a Likert-type scale, ranging from 1 (strongly agree) to 5 (strongly disagree), with 3 representing 'undecided or neutral'. Negative statements were reverse coded. The range of possible scores was between 12 and 60. A higher mean score indicates a greater willingness to take care of older people (appendix A).

3.3.4 Intent to Work with Older People Scale

This questionnaire is a rating scale measuring the intent of nursing students to work with older people. The Intent to Work with Older People questionnaire was developed and used by Nolan *et al* (2002) to explore the effectiveness of education in preparing nurses to meet the needs of older people. The questionnaire asked nursing students about their intentions regarding working with older people themselves and the potential impact of working with older people on their future careers.

The section on intent to work with older people included 15 items that explored students' intentions in three broad areas: working with older people in general, personal disposition to work with older people and perceived consequences of working with older people. Items were rated from 1 (strongly agree) to 5 (strongly disagree), with 3 representing 'undecided or neutral'. Negative statements were coded

in reverse. Therefore, possible scores ranged from 15 to 75 for the intention of students to work with older people. A higher mean score for the variables indicates a greater intent to work with older people. Nolan *et al* (2002) used this survey questionnaire with 718 student nurses and 855 qualified nursing practitioners to explore their knowledge and intentions to work with older people (appendix A).

3.3.5 Work preferences

The work preference section included three open-ended questions to explore the future preferences of nursing students to identify the reasons behind their work preferences with regard to older people in Saudi Arabia (Zakari, 2005). This study measured nursing students' work preferences by asking them to rank their preferences for providing nursing care to patients representing eight age categories: infants to 1-year-olds, pre-schoolers (2-4 years), school-age children (5-13 years), adolescents (13-19 years), young adults (20-39 years), middle-aged adults (40-55 years), young older people (58-74 years) and very old people (75 or older). I focused on two groups: the elderly (58-74), and older adults (75+). The study was presented two-way cross-tabulation of care for older people as a work preference (ranked by respondents from a list of eight client age groups), by willingness/unwillingness to take care of the older people as a career choice. The Chi Square performed showed the relationship between the work preferences of students and their willingness to take care of older people as a career choice. Finally, the researcher asked nursing students to state briefly the reasons for their choice of patients with whom they most preferred and least preferred to work: these qualitative responses are analysed in the qualitative data analysis section(appendix A).

3.3.6 Demographic Data

I designed a data form for demographic purposes. The demographic questionnaire included 17 items related to the personal characteristics of the participants, such as age, level of study, marital status, number of children, presence of older people in the home, contact with older people, experience caring for older people, and knowledge about ageing and the source of this knowledge. Furthermore, demographic data for faculty members included age, distribution across universities, current job title, gerontology through the nursing programme, preparation for the teaching of gerontology nursing, curriculum plans and factors that might influence nursing

students to work with older people in future (appendix A).

3.4 Pilot study

I conducted a pilot study to determine the feasibility of conducting this study. Gerrish and Lacey (2006) assert the importance of pilot studies in testing data collection instruments on small samples of people with similar characteristics to those in the full study to pick up misinterpretations and items that are frequently missed out or elicit partial responses. In this study, data from the pilot study were collected from July 10 to 13 2006 after I had obtained approval from the three participating nursing schools with a letter of explanation about the purpose of this research and how the outcome would help in the development of the nursing schools in Saudi Arabia. Furthermore, I obtained approval from the ethical committee at the University of Sheffield. I observed whether the students experienced difficulty in understanding the questionnaire wording and estimated the time needed for the completion of the questionnaire. I used an Arabic version of the questionnaire as a guide in assisting students who required further explanation of the questions in Arabic. Twelve Saudi first-year nursing students from a nursing school at a western Saudi university were asked to participate in the pilot study and to complete the study instruments once. The students were informed that their participation was voluntary and that they were able to withdraw at any time and for any reason. Additionally, the students were asked to give written comments on the questionnaire length, the language of the questionnaires and any obstacles to their understanding of the meaning of any questions.

In the light of this pilot study, it was found that the questionnaire took approximately 20-25 minutes to complete. The nursing students raised several important comments on the questionnaire. I thus redesigned the instrument to make the instructions clearer. Based on the pilot study, several recommended changes were made. For example, Item 14 (C) from Palmore's FAQ 2, which read, "Less injuries at home" was changed to "Fewer injuries at home". Other examples of changes in the work preference section included open-ended questions: for example, "Why did you choose working with the older people as your greatest work preference?" was changed to "Why did you choose working with older people as your most preferred work option". Furthermore, some nursing students suggested the translation of the instrument, due to

difficulty in understanding the meanings of some of the terms used, and the students asked questions about the meanings of certain terms, rather than entire questions. For that reason, back translation was performed in this study. Maneesriwongul and Dixon (2004) believes that exposure to questions in a less familiar language is unlikely to motivate participants compared to answering the same questions in their own native language and it is important to translate research instruments into the participant's language. Furthermore, in a study by Fry and Nguyen (1996), translation and back-translation were replicated three times to lower discrepancies between the primary source language and final target language versions. In this study, to avoid and correct any discrepancies between source and target language versions, back translation of the instrument was conducted between bilingual professional translators and myself, after checking several times with a group of nursing faculty experts in Saudi Arabia to validate the content for the final target language version. This allowed correction and reduced discrepancies between versions, in keeping with several other studies that have used panels of experts in back translation to establish content validity (Chen *et al* 1992; Li *et al* 2002; Wells *et al*, 2001).

3.5 Reliability and Validity Analysis

The validity and reliability of the data collection method are very important aspects of the research process, as this gives the research findings their credibility (Parahoo, 2006).

3.5.1 Reliability

Reliability analysis allows us to study the properties of measurement scales and the items that compose these scales. Reliability analysis also provides information about the relationships between individual items in the scale. Interclass correlation coefficients can be used to compute inter-rater reliability estimates. Significantly, in this study, the reliability of the scales was checked using an indicator of internal consistency, namely Cronbach's alpha coefficient, a model of internal consistency, based on the average inter-item correlation. Ideally, the Cronbach alpha coefficient of a scale should be above 0.70, and Polit and Beck (2006) report that "for most purposes, reliability coefficients higher than 0.70 are satisfactory, but coefficients in the 0.85 to 0.95 range are far preferable" (p.326). On the other hand, Cronbach's alpha

values are quite sensitive to the number of items in the scale. With short scales (e.g. scales with fewer than ten items), it is common to find relatively low Cronbach values (e.g. 0.5). In this case, it may be more appropriate to report the mean inter-item correlation for the items. Briggs and Cheek (1986) recommend an optimal range for the inter-item correlation of 0.2 to 0.4. In this study, the reliability test for the modified Kogan ATOP scale revealed a Cronbach's alpha score of 0.72. For the modified Willingness to Take Care of Older People scale, the reliability coefficient for this study was 0.74, which indicates that the modified version has acceptable internal consistency. Furthermore, for the Intent to Work with Older Adults scale, the reliability coefficient (Cronbach's alpha) was 0.73 in this study. The scale reliability results for the study are summarised in Table 3.2

Measurements	Cronbach's Alpha
Modified Kogan	
Attitudes Toward Older People	0.72
Modified willingness to take care of older people	0.74
Intention to work with older people	0.73

Table 3. 2: Reliability for the three research instruments.

3.5.2 Validity

The second important criterion for evaluating a quantitative instrument is its validity. Validity is the degree to which an instrument measures what it is supposed to measure (Polit and Beck, 2006). Guba and Lincoln (1989) suggested that specific strategies be used to attain validity. Significantly, validity underpins the entire research process and refers to the degree of consistency or accuracy with which an instrument measures the attribute under investigation (Cormack, 2000). In this study, the validity coefficient was computed by using a mathematic formula that correlates scores on the instrument with scores on the criterion variable (Table 3.3). These coefficients (r) range

between.00 and 1.00, with higher values indicating greater criterion–related validity. Coefficients of 0.70 or higher are desirable. In this study, the coefficient (r) range for validity for the modified Kogan Attitudes Toward Old People Scale (ATOP), the modified Elderly Patient Care Inventory (EPCI) and the Intent to Work with Older People questionnaire were acceptable, at 0.766, 0.861 and 0.856 respectively. Furthermore, content validity has been obtained through examination by a bilingual panel (Arabic and English) of 12 experts, recruited to establish the content validity of the instruments (Zakari, 2005). The panel consisted of experts in the fields of Gerontology, Geriatrics, Nursing, Medicine, Education and Research. It included faculty members from three universities and consultants from the Ministry of Health in Saudi Arabia. Zakari (2005) summarises the criteria for content validity, as used in this study:

1. Clear and simple wording of questions.
2. Easy to understand.
3. Relevant to purpose of study.
4. Comprehensive questions.
5. Appropriate to Saudi Arabia
6. Appropriate length for each question.
7. Appropriate length of entire questionnaire.
8. No bias in responses in either direction.
9. Appropriate ordering of the questions
10. No redundancy in questions.

Research instruments	Validity
Modified Kogan	
Attitudes Toward the older people	0.766
Modified willingness to take care of Elderly	0.861
Intention to work with older people	0.856

Table 3.3 : Validity test results for research instruments.

3.6 Sampling methods

3.6.1 Selection of school settings

I contacted several faculty Deans from the Baccalaureate of Nursing programme in Saudi Arabia by email from the United Kingdom at the beginning of November 2005 to ascertain whether their nursing curricula met the following criteria for this study:

1. The school provides five-year Bachelors nursing degree programmes.
2. The school provides integrated gerontology courses for nursing students.
3. The school has a large number of Saudi nursing students.
4. The school has recruited faculty members from different specialties: medical and surgical nursing, fundamental nursing, community health and psychiatric nursing.
5. The school provides clinical experience with older patients in a hospital setting.
6. The school would provide support for me to facilitate and promote the study.

Of the schools contacted, three were found to meet the study criteria. One school was located in the eastern region, with a total population of 213 nursing students, the second was in the central region and had a total population of 205 nursing students, and the third was in the western region and had a total population of 351 nursing students. The total population thus comprised approximately 769 nursing students on identical baccalaureate nursing programmes in three universities. I approached the schools prior to the beginning of the semester and requested permission to conduct the study.

The sample population was obtained from schools that met the study criteria listed above. No restrictions regarding age or previous experiences with older people prevented subjects from participating in the study. I invited all eligible nursing students and faculty members from the three nursing education programmes to participate in this study.

Undergraduate faculty were included in the sampling because several researchers have found that students' attitudes toward older people reflect the attitudes of their teachers. In addition, descriptive data about the educational preparation of the faculty and their experiences in teaching gerontological nursing were though important to the

understanding of the students' educational experiences with older people. Faculty were included in the study sample only if they had a direct teaching role with undergraduate students.

3.6.2 Nursing curriculum in selection sample:

I carried out this study on nursing students studying the curriculum for a five-year programme leading to the degree of Bachelor of Science in Nursing, the B.S.N. Clinical placements for the programme are provided through arrangements with a variety of hospitals and other health care facilities for the purposes of accomplishing course objectives. Clinical practice is under the supervision of the university nursing faculty. The curriculum is based on concepts, principles and theories from various disciplines within the nursing process. Through the nursing process, the student learns to establish priorities. The programme faculty believes that learning is an internal process and is evidenced by changes in behaviour of the individual (King Abdulaziz University, 2001):

"The philosophy of the undergraduate nursing programme supports the programme within the overall philosophy of the university. The nursing programme recognizes each human being's uniqueness of mind, body and spiritual being and is dedicated to caring for human beings at any point in the life cycle. The nursing curriculum prepares its graduates to care for human beings, with respect for their personal worth, dignity and feelings, and recognizes rights and responsibilities. Academic members encourage sound judgment and critical thinking through the integration of social, behavioural and biological sciences. The nursing programme believes that the concepts of human beings, the environment, health and nursing are essential components of a nursing curriculum." (King Abdulaziz University, 2001).

The three nursing schools that were selected for the study each have a Faculty of Medicine and Allied Sciences. In 1977, the first nursing programme in Saudi Arabia was authorised, based on the American Curriculum, leading to the degree of Bachelor of Science in Nursing. The first degree was conferred in 1982. The baccalaureate nursing programme was revised and updated in 1994 to meet both the current needs of students and the future health needs of Saudi Arabia (King Abdul Aziz University, 2001).

First and second years: The first two years of study include required courses in behaviour, humanities, basic sciences and English language. Concepts fundamental to

the practice of nursing are introduced. The basic adaptation requirements of hospitalised patients are identified through health histories, health examinations and the use of nursing processes in selected clinical placements.

Third and fourth years: The third and fourth year courses are considered upper division nursing courses. They focus on student interactions with individuals, families and groups who have moderate to intense adaptation requirements or alterations in communication, behaviour and bio-physiological patterns.

Fifth year: following completion of the fourth year, nursing students are required to complete the clinical nursing practice scholarship under the supervision of the in-service education departments of participating hospitals.

All three schools reported that had classroom content in gerontology integrated into other nursing courses. Estimated of the amount of classroom time spent on this topic varied. Specific content related only to ageing varied from five to ten hours over the three schools. It was noted by all three faculty that content on ageing was included as appropriate when topics such as physical assessment and chronic disease. Furthermore, all three schools had used nursing-home setting as clinical sites for teaching fundamental nursing skills and physical assessment. Faculty teaching in the schools had not been prepared as specialist in gerontological nursing, although few of faculty had taken some graduate courses in older people care. Clinical instruction within the nursing home was assigned without the requirement of special training or interest in care of older people.

3.6.3 Study methods

A. Phase I. Survey of Nursing students:

Sampling is an important step in the research process. In quantitative studies in particular, the findings can be seriously compromised by sampling inadequacies (Polit and Beck, 2004). The target population for this study was made up of nursing students and their teachers in university nursing programmes in the central, western and eastern provinces of Saudi Arabia. Questionnaires were returned by 566 students for a response rate of 74 % and the overall response rate was acceptable. There were approximately 26 % of the students who did not respond. Because this was a very busy time for the students, some may have been reluctant to take the time to complete the questionnaire. Gerrish and Lacey (2006) warn that low response rates in research can have a significant impact on the usefulness of findings and suggest that the generally accepted level of response to be aimed for is 80%, but Veeramah (2004) found a 51% variation in response rates among graduate nurses and midwives, while Russell *et al* (2004) reported a 44% response rate among nurses, doctors and dentists in primary care. Significantly, Gerrish and Lacey (2006) suggest that sample sizes should be increased to increase the power of analysis and minimize sample error. Similarly, Seaman (1987) points out that the size of the sample depends on the size and nature of the population and large samples are better.

However, to ensure a representative number of respondents from each region and an equal number from each academic level of study, I used a proportional quota sample. Gerrish and Lacey (2006) demonstrate that the size of the quota in the sample is proportional to the number of people in that category in the target population. Proportional quota samples are created by identifying population strata and determining the proportion of participants needed for each stratum (Parahoo, 2006). This will help the researcher to ensure that diverse population segments are represented in the sample. Quota sampling represents over non-probability-based sampling such as convenience sampling (Polit and Beck, 2006). To ensure an adequate sample to conduct the analysis, sample size was established before data collection.

Power analysis was conducted in this study using a power of 0.80, an alpha level of 0.05 (0.05 probability of type 1 error), and a conservative medium effect size of 0.15 (Cohen, 1992). The power analysis in this study indicated the need for a sample size of 78 in each site to void type II error. To minimize the factors' such as refusal to participate, attrition, missing and incomplete data, the final sample size was enlarged from 78 to 171 for the central region, from 78 to 229 for the Western region and from 78 to 166 for the Eastern region. Cohen (1992) defines the effect size as follows:

Small = 0.2

Medium = 0.15

Large = 0.30

These definitions and values for “small”, “medium” and “large” effects are conventions as described by Cohen (1992). A “medium” effect is defined as one which is visible to the naked eye as a large one. Sample size is a crucial issue in quantitative research to enable researchers to generalize their findings to the wider world. It is therefore essential to consider whether the sampling method and the sample size were appropriate for the purpose of generalisability in this study.

Likewise, Parahoo (2006) points out that:

"In quantitative research, the purpose of sampling is to collect valid and reliable data from a subset of the population that would be representative of the whole population. These finding are often expected to be generalisable to other similar population and setting. The representative of the sample and generalisability of finding depend on at least four factors: the size and the characteristics of the sample, the method of sampling, the setting where the study was carried out and the response rate ". (p.276)

Similarly, Polit and Beck (2006) suggest that if the characteristics of the sample are representative of those of the population, the generalisability of the results to the population is enhanced. I consider that I have achieved representativeness in selecting my sample from 769 nursing students at different levels of study in three baccalaureate nursing programs, the only ones that are government funded in the Kingdom of Saudi Arabia. On the other hand, the limitations of this study should also be considered. All participants were female, and in Saudi Arabia, nursing is still a female-dominated field; there is no male nursing BSN degree yet. Therefore, the results may only reflect and be generalized to Saudi female Bachelor of Nursing

students concerning the care of older patients in Saudi Arabia. Furthermore, the instruments used in this study have been validated and shown to have accepted reliability results with a Saudi population as I discussed in the previous section. In the light of this, Pilot and Beck (2006) noted that researchers must design studies strong in reliability and validity to enhance the generalisability. However, that allowed me to achieve representativeness in the sample to generalize the findings from this study sample to a wider population such as Saudi female Bachelor of Nursing students. The total population comprises 769 nursing students on identical baccalaureate nursing programs in three universities. The western University in Jeddah has a total population of 351 nursing students, while the central University in Riyadh has a total population of 205 nursing students and the eastern University's total population is 213 nursing students. The gerontology curricula in all three universities are identical, as they are integrated through the nursing program.

Data collection: The instruments that were used in this phase were the Modified Kogan Attitudes Toward Old People Scale (ATOP), developed by Kogan in 1961 to measure attitudes toward older people; the Modified Facts on Ageing Quiz 2 (FAQ2), developed by Palmore in 1988 to examine health professionals' knowledge on ageing; the Modified Elderly Patient Care Inventory (EPCI), developed by Aday and Campbell in 1995 to examine the work preferences of nurses and their willingness to care for older people, and the Intent to Work with Older People scale (Nolan et al, 2002). Permission has been granted to use these instruments.

Setting: I conducted this study in the three government-funded nursing schools at major universities in three cities in Saudi Arabia: Western University in Jeddah, Central University in Riyadh and Eastern University in Dammam.

Identification and recruitment: I distributed the survey questionnaires at three nursing schools to 769 Saudi nursing students at the beginning of five different academic levels. The questionnaires were handed out in classrooms after explaining the importance of the study to nursing professionals. The number of surveys returned in this phase was 566, representing a response rate of 74 %.

B. Phase II Pre-/post-tests were used to examine the effect of 32 weeks' clinical nursing practice in the hospital on the nursing first year and internship year (pre registration year) to explore participants' knowledge, attitudes, willingness, intentions and work preferences towards the care of older people at three university hospitals in the Kingdom of Saudi Arabia. The primary advantages of this pre-/post-test design are that it compares the effects of clinical experience on nursing students' knowledge, attitudes, willingness, intentions and work preferences toward older people at the beginning and the end of 32 weeks' clinical experiences with older people in a hospital setting.

I used pre- / post- tests to identify the following:

Hypotheses

- 1- There is a significant difference in knowledge about aging, attitudes toward older people and willingness toward working with older people before and after completing 32 weeks' clinical experience among first year and pre-registration nursing students.
- 2- There is a significant difference in intent to work with older people before and after completing 32 weeks' clinical experience among first year and pre-registration nursing students.

Null Hypotheses

- 1- There is no significant difference in knowledge about aging, attitudes toward older people and willingness to work with older people before and after completing 32 weeks' clinical experience among first year and pre-registration nursing students.
- 2- There is no significant difference in intent to work with older people in nursing students before and after completing 32 weeks' clinical experience among first year and pre-registration nursing students.

Sample: This phase involved a survey questionnaire for 232 first year and pre-registration nursing students on identical baccalaureate nursing programs in three universities. In this phase surveys were returned by 200 Saudi nursing students from three nursing schools at three different university hospitals, representing a response rate of 86 %.

Data collection: The instruments that were used in this phase were the Modified Kogan Attitudes Toward Old People Scale (ATOP), developed by Kogan in 1961 to measure attitudes toward older people; the Modified Facts on Ageing Quiz 2 (FAQ2),

developed by Palmore in 1988 to examine health professionals' knowledge on ageing; the Modified Elderly Patient Care Inventory (EPCI), developed by Aday and Campbell in 1995 to examine the work preferences of nurses and their willingness to care for elderly people, and the Intent to Work with Older People scale (Nolan et al., 2002). Permission has been granted to use these instruments.

Setting: The study was conducted in three major universities with government funding in the Kingdom of Saudi Arabia: East University, Central University and West University.

Identification and recruitment: Permission was obtained from nursing program deans and nursing hospital directors at three university hospitals in the Kingdom of Saudi Arabia. Internship Nursing Students were invited to participate during the first and the last week of the 32 weeks' clinical practice at the three university hospitals. I distributed the questionnaire to 125 first year nursing students and 107 internship nursing students at these hospitals before and after their 32 weeks' clinical experience with older people. The students were identified by the last four digits of their computer security numbers for pre- and post-test analysis purposes. I explained the purpose of the study to participants in a letter accompanying the questionnaire, ensured anonymity and confidentiality and allowed enough time for their responses.

C. Phase III (A)

This phase examined attitudes towards older people among faculty members and explored the perceived status of undergraduate gerontological nursing content in three nursing schools in the kingdom. In this phase, I sent a survey questionnaire to 173 full time nursing faculty members in three nursing schools: East University, Central University and West University.

Research questions:

- 1-What are the attitudes of nursing faculty members towards the care of older people?
- 2-Is there a relationship between faculty members' attitudes and nursing students' attitudes toward care of older people?

Sample: This was a voluntary convenience sample. A questionnaire was given to 173 nursing faculty members from three nursing schools at three government-funded universities in the Kingdom of Saudi Arabia with a response rate of 76 %, meaning that there were 132 participants.

Data collection: The instrument used in this phase was the Modified Kogan Attitudes Toward Old People Scale (ATOP), developed by Kogan in 1961 to measure attitudes toward older people to investigate their attitudes towards the care of older people. Moreover, demographic data was collected, as were data to assess the perceived status of the gerontologic nursing curriculum.

Setting: This phase of the study was conducted in three major universities in the Kingdom of Saudi Arabia. Western University in Jeddah, Central University in Riyadh and Eastern University in Dammam.

Identification and recruitment: Permission was sought from nursing program Deans at the three nursing schools in the Kingdom of Saudi Arabia. I sent the survey questionnaire to 173 nursing teachers to investigate their attitudes towards the care of older people, with a stamped addressed envelope for its return. Furthermore, a reminder was sent to the participants two weeks later. The questionnaire was filled in with complete anonymity and confidentiality in the nursing schools at three universities. Additionally, I explained the purpose of the study in a letter accompanying the questionnaire.

D. Phase III (B)

Three focus groups, each comprising 6-8 nursing teachers from the nursing faculty, discussed the status of gerontologic education in nursing curricula. The focus groups were held at the East University, Central University and West University.

The population: The participants in the focus groups comprised of nursing faculty members in three nursing schools at three universities in the Kingdom of Saudi Arabia. The main purpose was to discuss with them the status of gerontologic nursing education in the undergraduate nursing curricula in Saudi Arabia.

Sample: A convenience sample was used for three focus groups in three nursing schools, with each group containing 6-8 members, including two teachers from each specialty: medical surgical nursing, fundamental nursing and community health nursing from East University, Central University and West University. Mixed groups with homogenous characteristics are usually preferable in focus group discussions (Grbich, 2000). The reason for selecting participants from various branches was because in the nursing curriculum, integrated gerontology courses are mainly included in the above three specialties. Each focus group discussion was audiotaped (following respondents' consent) so that all information was documented and could be accessed repeatedly during analysis.

Data collection: Discussion with nursing teachers focused on their views and commitment toward teaching integrated gerontological nursing in undergraduate nursing curricula. Insights gained from exploring these perspectives would hopefully provide signposts for the teaching of gerontological nursing in nursing schools. The following issues were covered:

1. The students' clinical experiences in nursing school with ill and well older people in hospital, nursing home and community settings.

2. Knowledge or skills among nursing students with regard to caring for older people.
3. The gerontology programme and the part played by nurse educators as role models promoting work with older people.

The setting: This phase of the study involved focus group discussions, lasting one to one-and-a-half hours, being conducted in meeting rooms at three major universities in the Kingdom of Saudi Arabia: Eastern University, Central University and Western University.

Identification and recruitment: Permission was sought from nursing program Deans at the three nursing schools in the Kingdom of Saudi Arabia. I sent invitation letters with stamped addressed envelopes to nursing teachers from medical surgical nursing, fundamental nursing and community health nursing specialties, asking them to share their thoughts on gerontology education. Nursing faculty members who agreed to participate in group discussions were able to return their reply slips with an envelope addressed to the investigator via the university postal system. I contacted the teachers to discuss the plan for the focus group, such as the time and place, and asked them to sign a consent form. The meeting rooms used were also convenient for teachers, as they were close to their offices and students' classrooms. I also provided more information about the study and clarified any questions about the study. Prior to the meeting, I called the teachers to confirm the date, time and the place of the focus group meetings. The meeting rooms were quiet and all facilities were provided for my PowerPoint presentation. I can summarise the process of the focus groups discussions in the following table.

Part 1: Scene setting & ground rules
<p>I prepared the meeting room (chairs, lighting, temperature, flip chart, data show and material for presentations).</p> <p>I welcomed the participants, thanked them for their attendance and introduced myself to them.</p>
Part II: Individual introduction
<p>I asked the group to introduce themselves, giving simple background information about their teaching experiences in the nursing school.</p>
Part III: The opening topic
<p>I provided a short presentation about the study (aim, objectives and the main outlines issues will discussions in the focus groups).</p>
Part IV: Discussion
<p>I presented the issue that would be discussed in the focus group discussion; I attempted to involve all participants in the discussion of the issues and encouraged them to explore their views and ideas.</p>
Part V: Ending the discussion
<p>I thanked the entire group for their participation and explained how the discussion would help in the development of care for older people. Furthermore, I asked them for any further suggestions.</p>

Table 3.4: Focus group discussions process.

3.6.4 Internal and external validity for sample selection:

Cook and Campbell (1979) have identified several factors that might negatively influence study findings. In this study, I considered several factors during the sampling procedure that could have affected the study's validity. The most relevant of these were the use of students from different nursing schools, the failure of nursing students to complete the study, partial responses, the maturation of nursing students between pre-tests and post-tests and the process of repeated testing in the pre-test and post-test phases.

I took into account the first factor that might influence the research results, which was the selection of students from different nursing schools, which could have impacted on the external validity of the study. Parahoo (2006) points out that external validity is the extent to which the result of a study can be applied or generalized to other similar populations and places. I attempted to establish some equivalence among the samples selected, to minimize the effect of that factor, and all study participants were required to meet the following criteria:

All participants were Saudi nursing students enrolled in Bachelor of Nursing degrees, on an identical nursing programme curriculum from the Ministry of Higher Education, and all three institutions have the same government-required acceptance criteria. Furthermore, the three universities all used the integrated gerontology course in their programmes, and all of them used university hospitals for training nursing students during registration into nursing programme. In other words, there is an acceptable degree of homogeneity in the selected samples, which minimizes the threat to the external validity of the study from this factor.

The second threat to internal validity was the delay between the pre-test and post-test; as a result, students could fail to complete the study. I attempted to maximize cooperation of the students in the target population by enlisting the assistance of faculty members at each school as facilitators for the research study and increasing the sample number with help from their student team leaders and clinical personnel to

decrease attrition from the study. A faculty member informed nursing students of the date and time at which I would be coming to describe the study and collect data. At each school, I introduced the potential and importance of study for the nursing profession and care of older people in the kingdom. The volunteer research facilitators and I distributed the survey questionnaires at the beginning of the academic year. The questionnaire was completed in classrooms and then returned to me after 20-30 minutes, which helped to increase the response rate. According to Palmore (1998), it is important for the respondents to be given plenty of time to finish answering the questionnaire because rushing can artificially lower scores. As the study aimed to assess nursing students' knowledge about older people, I considered it preferable to administer the questionnaire in a classroom setting to prevent the students from consulting external resources. As suggested by Palmore (1998), the FAQ was collected for scoring by me before the correct answers were given. The students agreed to write the last four digits of their registration security numbers on the questionnaires for pre- and post-test analysis purposes. I assured confidentiality and explained that agreeing to answer the questionnaire would be taken to imply informed consent to participate in this study: Polit and Hungler (1999) propose that if a participant completes a questionnaire, this means that consent has been obtained. Furthermore, to avoid partial responses, I stayed in the classroom while questionnaires were being completed in case any of the students required clarification on any aspect of the questionnaire, but was careful not to impose my attitude and view toward older people on participants during such clarification. Gerrish and Lacey (2006) point out that partial responses or items being left blank are common problems with questionnaires and can irritate the researcher. Eaker *et al* (1998) criticise the older people questionnaire, arguing that partial responses are a common problem with this measure.

To reduce the problem of partial responses, I assured to the participants that their answers to the questionnaires would not affect their grades in nursing school and that all data would be kept confidential. However, as I had not been a nursing faculty member for five years, the students did not remember me as a faculty member in the school and this factor was unlikely to have an effect on their participation in the study. Parahoo (1997) criticized the validity and reliability of attitude measurements, stating that:

'There are particular problems that can threaten the reliability and validity of the responses in attitude measures. For example, self-administered questionnaires give the opportunity for respondents to confer with others or consult other resources' (p. 302).

To avoid this threat I asked the students not to share their knowledge or opinions with their colleagues while completing the questionnaire, and they were assured that the scores for their responses would not impinge on their course grades or course evaluations or their relationships with me or any faculty member, and that they should express their actual knowledge and attitudes towards older people, either positive or negative. To encourage nursing students to complete the questionnaires, I provided chocolate and a cancer support group patch to each student who completed the entire study as acknowledgment. Due to the nature of the study and the pre-test/post-test design, it was not possible to add to the sample once the study had begun. Therefore, every effort was made by me to facilitate students' and faculty members' participation. In addition, it was important to consider maturation between the pre-test and post-test phases. Bowling (2002) states that sample attrition refers to loss of sample members before the post-test phase starts, which can be affected by the length of the time period between survey waves, and the type of respondent. Unfortunately, while I tried to maximise the sample to minimize this threat, a considerable period of time elapsed between the pre- and post-test, as 32 weeks' clinical experience are compulsory in nursing programmes in Saudi Arabia. These clinical placements in hospitals serve to consolidate theory into clinical practice to maximize nursing students' exposure to different cases of ill and well older adults.

3.7 Ethical issues

Permission was obtained from the ethical committee at the school of Nursing and Midwifery at Sheffield nursing school. Furthermore, permission was sought from the three participating nursing schools in Saudi Arabia. Nursing students were informed that they had the right to choose not to participate in the study. If they chose not to participate, it would not affect their grades or status in their nursing programme. If they chose to participate their identity would be protected and their responses kept confidential. However, due to the longitudinal nature of the study, I had to collect pre-test and post-test information. Therefore, I asked all students to place the last four digits of their registration number on the pre-test and post-test forms to allow their

responses to be matched. Nursing students were informed that I did not have access to their registration numbers; as a result, anonymity was assured. Nursing students were also informed that they could withdraw from the study any time without penalty.

3.8 Data collection procedure

3.8.1 Collection of survey data

Permission to use the modified Kogan Attitude Toward Old People Scale (ATOP), the modified Facts on Ageing Quiz 2 (FAQ2) and the modified Elderly Patient Care Inventory (EPCI) were obtained from the author (Zakari, 2005). These instruments had been used in a Saudi version previously. Additionally, permission was sought from author of the Intent to Work with Older People questionnaire (Nolan *et al*, 2002). After permission had been granted by Sheffield University and the participating nursing schools in Saudi Arabia, I travelled to Saudi Arabia to collect research data in November 2006, just before the nursing students started the new academic year. The nursing students were assigned to their clinical groups by faculty members working at their institutions. Faculty members from each of the three selected schools told students that a doctoral student from Sheffield University was coming to their school at a specific date and time to talk to them about participating in a research study. Students were also informed that if they decided to participate in the study, they would be required to stay after class for approximately 30 minutes. This information was provided to students approximately one week prior to my attendance at the schools. I set a schedule for the planned data collection from each nursing school and sent it to each nursing school.

On the day of data collection, faculty members introduced me to the nursing students and helped to distribute the questionnaire in classrooms. At each school, I explained the study's aims, objectives and purpose to the nursing students and faculty member and informed them about ethical issues. Nursing students from the first year and final year of each school were informed of the time commitment for completing the post-test. In this study, I examined the effect of clinical experience among first year nursing students taking the Fundamentals of Nursing course, which allows students to expand their knowledge about older people, clinical knowledge, nursing skills and procedures based on the physiological, psychological, cultural and developmental needs of older people. Health assessment for older people has been introduced to

allow students to develop skills in identifying people's health status in the context of the ageing process and health patterns as deviations from the normal. During this course, students practice nursing procedures and develop their skills through experiences with older people in hospital, and these clinical experiences enable students to interact with older individuals, be they well or ill, using nursing assessment skills and implement basic nursing intervention using relevant ageing nursing theories. The clinical rotations through the clinical area are as follows for final year nursing students (Table 3.6).

Clinical area	Periods
Surgical rotations (2 months)	3 Weeks male
	3 weeks female
	2 weeks OR
Medical Rotation (2 months)	3 weeks male
	3 weeks female
	2 weeks dialysis
Critical care rotation	4 weeks ER
	4 weeks MICU or SICU
Clinical Elective areas	8 weeks

Table 3.5: The clinical rotations through the clinical area for final year nursing students.

Furthermore, I also sent the survey questionnaire to nursing teachers, asking them about demographic data such as age, position and educational background, as well as their attitudes towards the care of older people using the ATOP scale (Kogan, 1961). I included a return address and a stamped envelope with each questionnaire. A reminder was sent to the participants two weeks later. The questionnaire was completely anonymous and confidential. I explained the purpose of the study in a letter accompanying the questionnaire.

3.8.2 Collection of focus group data

Morgan (1996) states that focus groups are basically group interviews that rely on interaction within the group, based on topics that are supplied by the researcher, who typically takes the role of moderator, and he defines a focus group as follows:

"Focus group is a research technique that collects data through group interaction on a topic determined by the researcher. In essence, it is the researcher's interest that provides the focus, whereas the data themselves come from the group interaction."(p,6)

A series of focus groups interviews was held with nurse educators to give them an opportunity to air their views about gerontologic nursing education and make comments on the issues raised by the nursing students in response to the open-ended questions from the survey questionnaire. In a more practical vein, I used the focus group discussions to share nursing faculty members' views and recommendations toward teaching gerontological nursing in undergraduate nursing curricula. Morgan (1998) asserts that focus group discussions can provide evidence about similarities and differences in participants' opinions and experiences, as opposed to reaching conclusions. Likewise, Joyce (2008) points out that a focus group is a chance to observe a discussion on a topic in a limited time with a large amount of interaction. Teachers were provided with several comments and reflections on the care of older people raised by the nursing students. Joyce (2008) suggests that the researcher should give the participants plenty of time to talk and recommends avoiding asking too many questions. I provided the topic, aims and objectives for participants prior to the discussion: the following issues were covered:

1. Knowledge or skills among nursing students as an educational need with regard to caring for older people.
2. Training experiences in nursing school with ill and well older people among nursing students in hospital, nursing home and community settings.
3. The gerontology programme and nurse educators as role models in training nursing students to work with older people.

I addressed these issues by using focus group discussions with nursing teachers in three schools to obtain an insight into the perceived educational requirements of nursing students to ensure competent care for older people. In my focus group discussions, I used both English and Arabic, according to the groups' wishes, and I worked as a moderator and guide for discussion. Focus group analysis includes coding and indexing on three levels: descriptive, interpretative and pattern coding (Miles and Huberman, 1994).

Bowling (2002) states that focus groups will typically contain between six and twelve participants and a group leader (the researcher) and the researcher needs to be skilled at creating a comfortable atmosphere, leading group discussion and handling conflict as well as drawing out passive participants. Joyce (2008) points out that in the focus group discussion, the moderator should provide a short note to introduce the study and encourage the participants to participate actively. In the present study, three focus groups were held, one in each of the three nursing schools, with each group containing 6 to 8 members, including two teachers from each specialty: medical surgical nursing, fundamental nursing and community health nursing. Joyce (2008) recommends that a focus group should ideally contain 4 to 8 participants, as larger groups can become difficult to control and not allow all participants to share their views. Mixed groups with homogenous issues are usually preferable (Grbich, 1999). Likewise, Morgan (1998) points out that homogeneity in focus group allows more free-flowing conversations among participants within the group, which facilitates analysis that examines differences in perspective between groups. The reason for selecting participants from these three branches is because in the nursing curriculum, integrated gerontology courses are mainly included in the above-named three specialties: fundamental nursing, medical surgical nursing and community health nursing. Each focus group was audiotaped (after gaining respondents' consent) so that all information was documented and could be accessed repeatedly during analysis. Parahoo (2006) suggested the use of tape recorders for focus groups to facilitate the analysis procedure. In some cases, during focus group discussions, the voices of participants can become jumbled when two or more people talk at once. To avoid this, I frequently reminded the participants to talk in clear and understandable voices, especially as the debate progressed. Likewise, Joyce (2008) argues that focus group

numbers can affect focus group recording and transcribing. However, as the moderator, I did my best not to get involved and interfere in the conversation and the debate when I felt that the interaction would produce useful data. Finch and Lewis (2003) suggested that moderators need to encourage group discussion and create opportunities for all participants to share. Likewise, Joyce (2008) points out that:

"The moderator can stress that there are no right or wrong answers, that all views are of interest, and that the aim is to hear as many different views- points or experiences as possible. The moderator can add that the participants can agree or disagree with other viewpoints and are free to say what they think. It is important to ask the participants to treat what others say as confidential and not to repeat the viewpoints and experiences outside the session." (p.293)

I worked as a nurse educator in a nursing school for more than 10 years. This experience enabled me to engage in group discussion. Interestingly, sharing the same views and understanding the situation provided an advantage that appeared to enable the participants to speak freely with me, as I was knowledgeable about the care of older people in Saudi Arabia from a culturally-sensitive and educational perspective.

The focus group discussions were conducted in meeting rooms in each nursing school, lasting one to one-and-a-half hours, and I provided refreshments for each sitting. Each focus group was audio-taped (with respondents' consent) so that all information was documented and could be accessed repeatedly during analysis. Additionally, the transcriptions of these focus group discussions were sent to participants, to achieve verification and adequate cross-referencing.

3.9 Research Methods - Analysis:

3.9.1 Quantitative analysis

I used the Statistical Package for Social Science (SPSS) version 15 to analyse all quantitative data, using descriptive and inferential statistics. The demographic data for nursing students and teachers were analysed using descriptive statistics: frequency distributions, percentages, means and standard deviations. The selection of statistical tests depends, among other factors, on sample size, sampling method, level of measurement and on whether the variables to be measured in the sample are normally distributed in the population or not (Parahoo, 2006). I selected parametric tests

because the variables in this study were normally distributed and dealt with very large sample numbers (Watson *et al*, 2006).

Munro (1997) explain the differences between parametric and non-parametric tests. The main difference between these two classes of techniques is the assumptions about the population data that must be made before the parametric test can be performed. For t-tests and analysis of variance (ANOVA), for example, it is assumed that the variable under study is normally distributed in the population and that the variance is the same at different levels of the variable, as shown in this study. Non-parametric techniques have relatively few assumptions that must be met before they can be used. In the light of this, Watson *et al* (2006) stated that the ANOVA test:

'...is able to discriminate between the variation between individuals within a sample and the variation between sample means. The results from ANOVA are valid so long as the samples are independent and they come from a normal population" (p. 144)

Furthermore, in this study, I used Pearson correlation coefficients to determine and quantify the relationships between variables (Munro, 1997). For example, the correlation between the attitude of nursing students toward older people and intention to care for them was computed.

Fink (1995) suggests the following interpretation values, which were used in this study:

0 to +.25 (or-.25) = little or no relationship

+.26 to +.50(or-.26 to-.50) = fair degree of relationship

+.51 to+.75 (or-.51 to-.75) = moderate to good relationship

Over +.75(or-.75) = very good to excellent relationship

Similarly, Briscoe (2004) used a two-way analysis of variance (ANOVA) in a quasi-experimental study. Pre-test and post-test measurements were conducted to determine whether two methods of teaching gerontological nursing showed differences in increasing students' knowledge, fostering positive attitudes and changing students' intentions to work with older adults. The results revealed no differences in the participants' knowledge of ageing, although some differences were found for negative and positive attitudes toward ageing. Similarly, in this study, a paired t-test was used

to compare pre-test scores with post-test scores to examine the effect of 32 weeks' clinical nursing practice in a hospital setting.

Parahoo (2006) defines the t-test as a parametric test to compare the means of two samples: for example, in this study, independent t-tests were used to analyse the mean scores of pre-test and post-test items dealing with attitudes, knowledge, willingness, intentions and work preferences toward older people and to look for significant differences in attitudes between teachers and their students. Neuman and McCormick (1995) state that in visual analysis, the researcher examines data to see whether (1) a change has occurred; (2) the magnitude of the change; (3) the trend of the change; (4) the latency of the change, and (5) whether the change appears reliable, to determine whether or not a change has occurred due to intervention. Furthermore, the "effect size" was calculated for change scores and used as an estimate of the magnitude of change. The analysis of data was conducted with the help of the SPSS programme version 15, which helped in manipulating data and generating tables and graphs to summarize data. I used SPSS because it is time-saving, in that it contains several tools for manipulating data, including functions for recoding data and computing new variables, as well as merging and aggregating datasets. SPSS also has several ways to summarize and display data in the form of tables and graphs, so the reader is not faced with the same mass of data as the investigator (Pallant, 2005).

3.9.2. Qualitative analysis

Qualitative data analysis entails "the process of bringing order, structure and meaning to the gathering of collected data" (Marshall and Rossman, 2004). Similarly, Silverman (2006) reports that the aim of qualitative analysis is to understand the participants' categories and to see how texts and documents may be analysed for different purposes. Meanwhile, Parahoo (2006) points out that there are different types of data analysis in qualitative research depending on how structured the questions are. Likewise, Nolan (2008) states that, "qualitative analysis is therefore intimately linked to data collection and involves both cognitive processes and the application of varying structured techniques" (p. 343). Dixon *et al* (2008) consider that content analysis is commonly used in the social sciences and has been developed to transform qualitative data into more quantitative forms within frameworks. In a

more practical vein, Silverman (2006) states that in content analysis, researchers establish a set of categories and then count the number of instance that fall into each category. Likewise, Polit and Hungler (1997) point out that qualitative content analysis of the data permits the investigator to classify themes and patterns, and can be used with or without reference to a specific tradition of research. Dixon (2008) states that content analysis proposes to synthesise study reports by offering a systemic way to count and categorize themes.

In this study, Miles and Hubermann's (1994) content analysis approach was used to promote the analysis of open-ended questions and focus group discussions. In this study, the aim of the open-ended questions was to explore the reasons for selecting a career with older people as most or least preferred among Saudi nursing students, whilst the aim of the focus group discussions was to discuss nursing faculty members' views and recommendations with regard to the teaching of gerontologic nursing in the undergraduate nursing curricula. Miles and Hubermann (1994) recommend that content analysis be performed to develop a predefined thematic framework, contained on one A4 sheet for ease of working. Furthermore, Miles and Hubermann (1994) describe codes as tags or labels for prescribing units of meaning. This allows data to be categorized and aids thematic content analysis. The basic processes of content analysis are defined by Bowling (2002) as follows: data are collected, then coded by theme or category; the whole data set is then searched for the categories created and comparisons are made between data as appropriate. Similarly, Polit and Beck (2006) define content analysis as the analysis of the content to identify significant themes and patterns among themes using a particular analysis style, while Desantis and Ugarriza (2002) define the term "theme" as "an abstract entity that brings meaning and identity to a current experience and its variant manifestations. As such, a theme captures and unifies the nature or basis of the experience into a meaningful whole" (p.362).

In my research, the text from each open-ended question and focus groups transcript was read independently, with a search for similar words, patterns and themes. Thematic analysis from each participant was compared and cross-referenced between participants. Specific sections were then extracted from manuscripts, compiled, summarized and organized into categories. This approach allowed a variety of analyses, permitting the investigator to recognize important patterns and themes

across data sources.

3.9.2.1 Qualitative analysis from open-ended questions and focus group analysis

Open-ended questions and focus groups discussion interview tapes were transcribed verbatim by me. Interestingly, Joyce (2008) has reported that while it was once common to collect data from focus groups using flip charts and notes, audio recording is now more widely used. Silverman (2006) concludes that there are three advantages to using tape transcripts in qualitative data: tapes can serve as a public record, can be replayed to improve the quality of transcripts and can preserve the sequence of the discussion. Similarly, Bowling (2002) points out that some focus group transcripts from recordings are presented simply to illustrate qualitative data. Atkinson and Hertzog (1984) point out that the transcription of tapes is essential for qualitative research activities. This involves close, repeated listening to recordings, which often reveals un-noted recurring features of the interview.

To facilitate the analysis of my qualitative results, each sentence was located on a separate line to help with sorting and coding. Ritchie and Lewis (2003) demonstrate that data reduction is a central task in qualitative analysis in several different ways. In this study, the qualitative data obtained from open-ended questions and focus group discussions were analysed by using the guidelines for thematic content analysis that were proposed by Miles and Huberman (1994), who explain qualitative analysis in three concurrent flow guides:

1. Data Reduction is a form of analysis that sharpens, sorts, focuses, discards, and organizes data. In this stage the researcher needs to read the content many times to recognize the key elements to be reduced and transformed in many ways. Miles and Huberman (1994) state:

"Qualitative data can be reduced and transformed in many ways: through sheer selection, through summary or paraphrase, through being subsumed in a large pattern, and so on" (p. 21).

2. Data Display is an organized assembly of information that permits conclusions to be drawn and action to be taken and is a major avenue to validate qualitative data (Miles and Huberman 1994). At this stage, the researcher displays data in tables, charts or matrices to perform comparisons between themes and categories.

3. Conclusion drawing/verification: at this stage, the qualitative links between themes and categories are deciphered to explain what things mean by noting regularities, patterns, explanations, possible configurations, causal flows, and propositions.

The steps taken to analyse the qualitative data are outlined below:

Step1: interview tapes were transcribed verbatim in Arabic by me and then entered into my computer. Each sentence was placed on a numbered line to help with sorting and coding.

Step 2: the transcripts of the Arabic version were translated into English by me

Step 3: the translations were sent to two Saudi nursing teachers to confirm the accuracy of translation.

Step 4: the transcripts were read through several times and notes and highlights were made throughout the reading.

Step 5: the transcripts were read through again and several headings were categorized from the content. Open coding was used to derive categories from the text at this stage.

Step 6: The categories were grouped together and I read and reread the results many times to look for similar categories for the purpose of data reduction.

Step 7: A list of headings was drawn up and I ascertained the similarities between them; the final headings were grouped together to produce a set of results in the form of themes and categories.

Step 8: the transcripts were reviewed and separated into themes and all instances of each theme were collected together. The theme section represents the display stage. Some themes were combined together because they were very similar.

Step 9: the transcripts were read many times and sub-headings were ascertained to identify repeated words and ensure that all aspects of the data were covered.

Step 10: to enhance the validity of the results, two Saudi nursing teachers checked the results and adjustments were made to the final results accordingly.

For the qualitative analysis of the open-ended questions, I selected participants who had given clear, substantive and understandable responses that were relevant to the research question. Arabic responses were transcribed verbatim and then translated

into English, and the translations were sent to two Saudi nursing teachers to confirm the accuracy of translation. Maneesriwongul and Dixon (2004) suggests that it is important to translate research questions into the participant's language to motivate participants in answering the questions. The following open-ended questions guided the qualitative analysis: 1) What are the reasons for selecting a career with older people as your most preferred choice? 2) Briefly write your reasons for selecting a career with older people as your least preferred choice.

Having this chapter has focused on identifying an appropriate research design to answer the study's research questions and test its hypotheses to fulfil the aims of the study. Psychometric research measurements and their reliability and validity were identified. The chapter has also explained the sampling techniques used in this study, including the selection procedure, sample size and external and internal validity. Furthermore, ethical issues, data collection procedures, analysis methods and limitations of the study were discussed. The next chapter deals with the results of the quantitative analysis, including the demographic characteristics of the study, research questions and hypotheses.

Chapter 4

Quantitative Analysis

This chapter presents the analyses of the quantitative data in four sections. The first section deals with the demographic characteristics of the nursing students and the second considers the demographics of the teacher sample. In the third section, the research questions are answered, whilst the fourth restates the research hypotheses and presents the results of the statistical tests that were applied to these hypotheses.

Section one:

4.1 Demographic characteristics of Saudi nursing students:

This section presents a description of the demographic characteristics of the sample, including age, marital and socioeconomic status, religious, interaction with older people and source of knowledge related to ageing, to give a comprehensive description of Saudi nursing students.

4.1.1-Age, Marital status and number of children: The sample comprised 566 female students (the participating universities offer nursing studies only to females). The mean age of the respondents was 21.2 and the majority (82.9% n=469) of the nursing students as single. The data indicated that the respondents were young and predominantly single and the majority of the respondents were childless as. Tables 4.1 illustrate the distribution of students by marital status and number of children.

Marital status of respondents	Frequency	%
Single	469	82.9
Married	91	16.1
Divorced	4	0.7
Widowed	2	0.4
Number of children		
None	528	93.3
One	25	4.4
Two	8	1.4
Three	3	0.5
Four or more	1	0.2
Missing	1	0.2
Total	566	100.0

Table 4. 1: Saudi nursing marital Status and number of children.

4.1.2-Names of institutions and level of education:

The majority (40.3%) of the nursing students who participated in this study (n=229) were from a Western region university, while 30.2% (n=171) were from a Central region university, and 29.3% (n=166) were from the Eastern region University. 22.1% (n=125) of the students were in their first year, while 21.9% (n=124) were second years, 19.4% (n=110) were third years, 17.7% (n=100) were fourth years and 18.9% (n=107) were in their internship year as shown in Tables 4.2. These data reflect the increasing number of students enrolling in nursing programs in Saudi Arabia.

Name of Institution	Frequency	%
Western university	229	40.5
Central University	171	30.2
Eastern University	166	29.3
Level of education		
First year	125	22.1
Second year	124	21.9
Third year	110	19.4
Fourth year	100	17.7
Internship year	107	18.9
Total	566	100.0

Table 4. 2: Saudi nursing students by university and academic Level of Study.

4.1.3- Religious devotion and relationship between religion and elder care:

Islam is the religion of Saudi Arabia, and 100% of the students were Muslim. The data revealed that more than half of the respondents (52.7% n=298) considered themselves somewhat religious; approximately 38.2% (n=216) regarded themselves as religious; 5.7 % (n= 32) as not religious. In addition 87.3 5 % (n=494) of respondents believed in a relationship between taking care of older people and their religious beliefs, while 10.2% (n=58) did not as shown in Table 4.3. These data reflect that elder care is encouraged by the students' religion and that the Saudi culture expects respect and support for older people.

Religious	Frequency	%
Very religious	18	3.2
Religious	216	38.2
Somewhat religious	298	52.7
Not religious	32	5.7
Missing	2	0.4
A relationship between older people care and religion		
No	58	10.2
Yes	494	87.3
Undecided	4	0.7
Missing	10	1.8
Total	566	100.0

Table 4.3: Saudi nursing students by religious devotion and relationship between religion and older care (one answer).

4.1.4 Interaction with older people:

The data showed in Table 4.4 that majority of the respondents were living with at least one older people family member, 71.0% (n= 402), while 28.6% (n= 162) were not and only 25.4% (n=144) had worked with older people. In addition, 76.1% (n= 431) were not currently working with older people, while 17.8% (n=101) were currently working with them. The data indicate that most Saudi nursing students had no previous or current experience of work with older people.

Interaction with older people	Frequency	%
Older people living in home		
Yes	402	71.0
No	162	28.6
Missing	2	0.4
Previous work with older		
Yes	144	25.4
No	405	71.6
Missing	17	3.0
Currently working with older people		
Yes	101	17.8
No	431	76.1
Missing	34	6.0
Total	566	100.0

Table 4.4: Saudi nursing Students and interaction with older people (one answer).

4.1.5 Saudi nursing students' experience of older people:

The results show that more than half of the nursing students (50.2%, n=286) were without experience with older people, while 29.3% of respondents (n=166) had experience of caring of older family members, 10,8% (n=61) had experience of working with the older people in hospital, 2.3% (n=13) had worked in a residential or nursing home, 0.9% (n=5) had experience of voluntary work with older people and 0.7 (n=4) had worked with older people in any specific capacity. The data reflect that Saudi nursing students lack previous experience of older people.

Experience of older people	Frequency	%
Caring for older family members	166	29.3
Working in residential or nursing homes	13	2.3
Voluntary work	5	0.9
Working in hospital	61	10.8
Working as support worker	8	1.4
Working with old people in any specific capacity	4	0.7
Visiting in a nursing home	3	0.5
I have no experience of old people	286	50.5
Missing	20	3.6
Total	566	100.0

Table 4. 5: Saudi nursing students by frequency of experience with older people (one answer).

4.1.6-Saudi nursing students' frequency of contact with older people and caring for them in nursing practice:

The Table 4.6 shows the Saudi Nursing students' frequency of contact with older people within life bases and caring of them in nursing practice. These data reflect the Saudi nursing students' lack of training and experience in working with older people during their training at nursing school, either in hospitals or in nursing.

contact with people aged 60 or over	Frequency	%
Daily	104	18.4
Twice a week	40	7.1
Weekly	117	20.7
Once a month	165	29.2
Never	132	23.3
Missing	8	1.3
Care for older person in nursing practice		
No	328	58.0
yes	230	40.6
Missing	8	1.4
Total	566	100.0

Table 4.6: Saudi nursing Students by frequency of contact with the older people and caring for them in nursing practice (one answer).

4.1.7-Saudi nursing Students' knowledge of Ageing and dominant sources of knowledge:

Tables 4.7 illustrate that the majority of the students 68.6% (n=389) believed that they had knowledge about ageing, while 27% (n=157) did not. Nursing school was selected as the predominant source of knowledge about ageing, cited by 29.7% of the respondents (n=168). This was followed by family and friends (26.5%; n=150), the media (11.7%; n=66) and school (8.5%; n=48). 23.7% (n=134) of nursing students reported that they had no knowledge about ageing.

Self-assessed Ageing knowledge		
	Frequency	%
No	157	27.7
Yes	389	68.6
Missing	20	3.5
The dominant source of Ageing knowledge		
Schools	48	8.5
Nursing College	168	29.7
Family and friends	150	26.5
Media	66	11.7
Missing	134	23.7
Total	566	100.0

Table 4.7: Saudi nursing Students by knowledge of Ageing and dominant source of knowledge of ageing (one answer).

4.1.8-Saudi nursing Students by Number of gerontology course credit hours and type of course:

Table 4.8 illustrates the type and number of gerontology courses taken by nursing students and the number of credit hours. These results indicate that the educational backgrounds of the students are inconsistent in terms of gerontological education. Additionally, some of them are not receiving enough gerontology training and there is a lack of clinical training with older people. Furthermore, no estimate could be made regarding gerontology clinical time, because nursing students' assignments depend on the clients' acuity levels rather than their ages.

Number of Courses-	Frequency	%
0	220	38.9
1	156	27.6
2	70	12.4
3	45	7.9
No answer	75	13.2
Total	566	100.0
Number of credit-hours		
1	72	12.7
2	103	18.2
3 or more	93	16.4
No answer	298	52.7
Total	566	100.0
Type of course		
Theory	189	33.3
Clinical	15	2.7
Both	67	11.8
None	172	30.4
No Answer	123	21.7
Total	566	100.0

Table 4.8: Saudi nursing Students by number of gerontology course credit hours and type of course.

4.1.9. Factors that have the greatest influence on nursing students' future career choices with regard to older people:

The results in Table 4.9 reveal that 28% of the respondents (n=159) cited clinical experience as the major and the greatest factor that influence in their preferences regarding the care of older people in future, followed by past experience with older people, which was cited as the main influence by 25 % (n=144) of respondents. A further 17% (n=98) indicated that teaching methods in gerontologic nursing were the key determinants of their decision, while 9% (n=50) cited the attitudes of nursing teachers as role models and 7% (n=41) indicated the effect of the peer group. Finally, 9% (53) cited other factors, such as religious beliefs and family effects. The data reflect that clinical training and past experience with older people had a great influence on nursing students' decisions regarding the care of older people as a future career.

Factors that have <u>the greatest</u> influence on nursing students' future career choices (one answer).		
	Frequency	%
Teaching methods of gerontologic nursing	98	17.3
Past experience with older people	144	25.4
Attitudes of nursing teachers as role models	50	8.8
Peer group	41	7.2
Clinical experience	159	28.1
Other	53	9.4
Missing	21	3.7
Total	566	100.0

Table 4.9: Factors that have the greatest influence on nursing students' future career choices (one answer).

Section two:

4.2: Demographic characteristics of faculty members in the Saudi BSN program

This section presents a comprehensive description of the demographic characteristics of the faculty members at the Saudi BSN program, which teaches integrated gerontologic nursing in three universities in the kingdom of Saudi Arabia, including age, distribution across universities, current job title, gerontology through the nursing program, preparation for the teaching of gerontology nursing, curriculum plans and factors that might influence nursing students to work with older people in future.

4.2.1 Age of nursing faculty, name of university and Current job title:

Table 4.10 shows most of the nursing staff are relatively mature and over 40 years old and the distribution of the nursing faculty in the three major universities in the Kingdom of Saudi Arabia, with their current faculty job titles. In fact, the data revealed staff shortages in all of these roles relative to the number of nursing students in the three major universities in the kingdom.

Age group	Frequency	%
19-29	11	8.3
30-39	26	19.7
40-49	49	37.1
50-59	42	31.8
60 and over	4	3.0
Total	132	100.0

Table 4.10: Age of nursing faculty members at BSN university.

4.2.2 Current job title:

Table 4.11 describes the distribution of the nursing faculty in the three major universities in the Kingdom of Saudi Arabia with their current faculty job titles.

Current job title	Frequency	%
Instructor	76	58
Associate Professor	40	30.5
Professor	16	12.1
Total	132	100.0

Table 4.11: Nursing faculty number by description of BSN nursing faculty job titles.

4.2.3 Gerontology integration and academic preparation through the nursing program:

Table 4.12 illustrates that the majority of nursing faculty members (84.09%: n=111) teach gerontology for nursing students through the nursing program as part of an integrated curriculum of medical, surgical, community health nursing, fundamental nursing and psychiatric nursing. Furthermore, large majority of the faculty members (n=122: 92.4%) had not received any academic gerontology nursing preparation. These results highlight the fact that nursing faculty staff teaching nursing students in the integrated gerontologic program at the Saudi BSN have not received graduate level preparation in this specialty, which leads to a lack of appropriate supervision by clinical preceptors who are adequately trained in gerontology and an absence of contact with gerontology professionals who might serve as positive career models in students' nursing future.

Gerontology integration	Frequency	%
Gerontology teaching		
yes	111	84.09
No	21	15.90
Gerontology academic preparation		
Doctorate in gerontology	2	1.5
Master's degree in gerontology	3	2.27
Other degree in gerontology	5	3.7
No preparation	122	92.4
Total	132	100.0

Table 4.12: Integration of gerontology through nursing program and a academic preparation.

.4.2.4 Curriculum plan for gerontology nursing at BSN programs:

Table 4.13 demonstrates that the majority of nursing teachers (n=109; 82.6%) would prefer to include gerontology as a standalone course in the nursing curriculum. This result highlights BSN teachers' suggestion to offer gerontological nursing as a separate course, with an emphasis on teaching gerontology theories and connected clinical issues related to older adults.

Curriculum plan to include gerontology as stand alone course	Frequency	%
Yes	109	82.6
No	23	17.4
Total	132	100.0

Table 4. 13: Curriculum plan to include gerontologic nursing as a standalone course in curriculum.

4.2.5 Factors that have the greatest influence on nursing students' choice of care of older adults as a future career choice.

Table 4.14 illustrates that BSN teachers 42% (n=56) agree that gerontology clinical experience as the greatest factor influencing nursing students' choice of care of older adults as a future career ,followed by teaching methods of gerontologic nursing , which was cited as the main influence by 29 % (n=38) of respondents. A further 17% (n=23) indicated that past experience with older people were the key determinants of their decision, while 7 % (n=9) cited the nursing teachers as role models and 5% (n=6) indicated the effect of the peer group. The data reflect that clinical experience with older people had a great influence on nursing students' decisions regarding the care of older people as a future career.

Factors that have the greatest influencing nursing students' choice of older care as a future career (one answer).	Frequency	%
Clinical experiences with older adults	56	42.45
Teaching methods of gerontologic nursing	38	28.8
Past experiences with older people	23	17.4
Nursing teachers as role models	9	7
Peer group	6	4.54
Total	132	100.0

Table 4.14: Factors that have the greatest influence on nursing students choice of care of older adults as a future career choice (one answer).

Section Three

4.3 Result of research questions

In this section, each research question is restated, followed by the results for that question.

4.3.1 Research question one: What is the knowledge of ageing held by Saudi nursing students at five different academic levels?

Questions	% Correct	Frequency
1-Life expectancy of Saudi person	43.6%	247
2- Life expectancy of Saudi man	40.5%	229
3-Number of widows	6.0%	34
4-Proportion of the widowed	6.4%	36
5-Proportion of elderly women	62.4%	353
6-Height	54.9%	311
7-Limited activity by type of illness	72.6%	411
8- Type of illness less frequently	28.4%	161
9-Lung capacity	80.6%	456
10-Liver size	20.0%	113
11-Cardiac output	76.4%	434
12-Subcutaneous tissue	76.9%	435
13-Sleep patterns	41.0%	232
14-Injuries at home	13.1%	74
15-Poverty level	37.8%	214
16- Places Saudi people live	53.9%	305
17-Suffer from "empty nest" syndrome	60.8%	344
18-Elderly workers	54.9%	311
19-Ability to adapt to changes	27.2%	154
20-Voluntary participation	31.1%	176
21-Reduced activity	67.1%	380
22-Rate of criminal victimization	60.4%	342
23-Fear of crime	51.4%	291
24-Law abiding	56.2%	318

4.15. Percentage distribution of knowledge of ageing among Saudi nursing students (n=566).

Tables 4.15 illustrate the overall scores on knowledge physical and behavioural aspects of ageing on the Facts on Ageing Quiz and the mean numbers of correct answers. The possible mean scores were between 0 and 24. A higher score indicates a better knowledge of physical and behavioural aspects of ageing. The mean score on the quiz for students on the Saudi BSN program was 11.13 (46.37%). According to Palmore (1977, 1988), on average, undergraduate students score 14 (56%) and nurses in practice score 16.5(66%). The findings in this study thus illustrate that Saudi nursing students have, in general, relatively poor knowledge of the physical and behavioural aspects of ageing.

4.3.2 Research question two: What are nursing students' attitudes toward older people, their willingness to take care of older people and their intentions toward the care of older people at five different academic levels in three universities in the kingdom?

Tables 4.16 and 4.17 and Figure 4.1 summarise the distribution of nursing students' scores from the descriptive analyses, presenting the lower bound, upper bound , mean and standard deviation of Saudi BSN students' attitudes toward older people, their willingness to take care of older people and their intentions toward the care of older people at five different academic levels in three universities in the kingdom. This study examined the attitudes of 566 nursing students using the modified Kogan Attitude Toward Old People Scale (ATOP) and found that the average attitude score was 3.18, with a standard deviation of 0.29. The score indicates a favourable and positive attitude among Saudi nursing students toward older adults. Figure 4.1 shows the mean score among nursing students' attitudinal differences toward older adults based on educational preparation. The mean positive attitude score was 3.19, with a standard deviation of 0.29, when nursing students entered the BSN program after completing high school, at which point most of them were in their late teens. The positive attitude slightly decreased in the second and third years before reaching a maximum in the fourth year and fifth years. The means for these four years were 3.14, 3.17, 3.22 and 3.19, with standard deviations of 0.27, 0.30, 0.27 and 0.33 respectively. These findings suggest that students already hold positive attitudes towards older people on entering the BSN program and that all Saudi nursing students at different levels of education hold positive attitudes toward older adults, regardless of whether or not they are on the integrated BSN program. Furthermore, this study yielded results for the modified Older people Patient Care Inventory (EPCI) for willingness, developed by Aday and Cambell in 1995. As shown in tables 4.16, the average score for willingness to take care of older people in the obtained sample was 3.44,

with a standard deviation of 0.56, indicating that Saudi nursing students were generally willing to take care of the older people. In fact, their willingness to care for the older people was strong on registering for nursing school, and declined slightly before reaching its maximum level in their pre-registration year, with mean scores of 3.48, 3.40, 3.37, 3.47 and 3.50 (SD 0.58, 0.61, 0.53, 0.55 and 0.55 , respectively) in the five-year nursing program.

In this study applied the Intent to Work with Older People questionnaire, developed and used by Nolan et al (2002), and the mean score for this measure in the obtained sample was 3.55 (SD 0.49). This finding indicates that Saudi nursing students have strong intentions to work with the older people. In a more practical vein, Tables 4.16 and 4.17 and figure 4.1 illustrate that the mean intention score was high 3.59 (SD 0.52) when students enrolled at nursing school, but decreased slightly in their second and third years before reaching a maximum in the fourth year and remaining high in their pre-registration year: the mean scores for each year were 3.45, 3.48, 3.60 and 3.58, (SD 0.47, 0.48, 0.52 and 0.50, respectively). In additional, I performed a one-way ANOVA test, as shown in Table 4.18, to determine whether there were any significant differences among students with regard to the research variables in three universities in the Kingdom of Saudi Arabia. The results of this ANOVA revealed no significant differences among nursing students from the three universities. In other words, there is an acceptable degree of homogeneity in the selected samples, which minimizes the threat to the external validity of the study from this factor. ANOVA was performed to compare the variance (variability in scores) in attitudes, willingness and intentions toward care for older people between nursing students. An ANOVA test was used because it can deal with differences in more than two groups, as is the case with this research question. Similarly, Watson *et al* (2006) stated that the ANOVA test "is able to discriminate between the variation between individuals within a sample and the variation between sample means. The results from ANOVA are valid so long as the samples are independent and they come from a normal population" (p. 144)

level of education	Questions	N	Mean	Std. Deviation	Agreement
First year	Modified Kogan Attitudes Toward the Older people	125	3.19	0.29	Agree
	Modified willingness to take care of the older people	125	3.48	0.58	Strongly Agree
	Intention to work with the older people	125	3.59	0.52	Strongly Agree
Second year	Modified Kogan Attitudes Toward the Older people	124	3.14	0.27	Agree
	Modified willingness to take care of the older people	124	3.40	0.61	Strongly Agree
	Intention to work with the older people	124	3.54	0.47	Strongly Agree
Third year	Modified Kogan Attitudes Toward the Older people	110	3.17	0.30	Agree
	Modified willingness to take care of the older people	110	3.37	0.53	Agree
	Intention to work with the older people	110	3.48	0.48	Strongly Agree
Fourth year	Modified Kogan Attitudes Toward the Older people	100	3.22	0.27	Agree
	Modified willingness to take care of the older people	100	3.47	0.55	Strongly Agree
	Intention to work with the older people	100	3.60	0.52	Strongly Agree
Internship year	Modified Kogan Attitudes Toward the Older people	107	3.19	0.33	Agree
	Modified willingness to take care of the older people	107	3.50	0.55	Strongly Agree
	Intention to work with the older people	107	3.58	0.50	Strongly Agree

4.16- Mean of Saudi BSN students' attitudes toward older people, their willingness to take care of older people and their intentions toward the care of older people in the kingdom at five different academic levels in three universities.

95% Confidence Interval for Mean								
Name of Institution	Study variables	Level of education	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Western University	Modified kogan Attitudes Toward the older people	First year	46	3.35	0.23	0.03	3.28	3.42
		Second year	63	3.26	0.39	0.05	3.16	3.36
		Third year	45	3.18	0.36	0.05	3.07	3.29
		Fourth year	40	3.26	0.25	0.04	3.18	3.34
		Internship year	35	3.20	0.22	0.04	3.12	3.27
		Total	229	3.25	0.31	0.02	3.21	3.29
	Modified willingness to take care of the older people	First year	46	2.86	0.31	0.05	2.77	2.96
		Second year	63	2.93	0.57	0.07	2.79	3.08
		Third year	45	2.86	0.37	0.06	2.74	2.97
		Fourth year	40	2.89	0.47	0.07	2.74	3.04
		Internship year	35	2.86	0.36	0.06	2.74	2.99
		Total	229	2.89	0.44	0.03	2.83	2.94
	Intention work with older people	First year	46	2.95	0.35	0.05	2.85	3.05
		Second year	63	2.96	0.45	0.06	2.85	3.08
		Third year	45	2.97	0.26	0.04	2.89	3.05
		Fourth year	40	2.95	0.33	0.05	2.85	3.06
		Internship year	35	2.93	0.32	0.05	2.82	3.04
		Total	229	2.95	0.35	0.02	2.91	3.00
Central University	Modified kogan Attitudes Toward the older people	First year	35	3.20	0.37	0.06	3.07	3.33
		Second year	26	3.33	0.29	0.06	3.22	3.45
		Third year	26	3.15	0.37	0.07	3.00	3.30
		Fourth year	35	3.21	0.23	0.04	3.13	3.29
		Internship year	49	3.34	0.28	0.04	3.26	3.42
		Total	171	3.25	0.31	0.02	3.21	3.30
	Modified willingness to take care of the older people	First year	35	2.87	0.39	0.07	2.74	3.01
		Second year	26	2.88	0.33	0.06	2.75	3.02
		Third year	26	2.71	0.40	0.08	2.54	2.87
		Fourth year	35	2.72	0.35	0.06	2.60	2.84
		Internship year	49	2.95	0.40	0.06	2.83	3.06
		Total	171	2.84	0.38	0.03	2.78	2.90
	Intention work with older people	First year	35	2.96	0.31	0.05	2.85	3.07
		Second year	26	3.07	0.26	0.05	2.96	3.17
		Third year	26	2.98	0.28	0.05	2.87	3.09

	Fourth year	35	3.04	0.29	0.05	2.94	3.13
	Internship year	49	3.01	0.29	0.04	2.93	3.10
	Total	171	3.01	0.29	0.02	2.97	3.05
Eastern University	First year	44	3.41	0.28	0.04	3.32	3.49
	Modified Second year	35	3.30	0.23	0.04	3.22	3.38
	kogan Third year	39	3.20	0.23	0.04	3.13	3.27
	Attitudes Fourth year	25	3.25	0.27	0.05	3.14	3.36
	Toward the Internship year	23	3.14	0.33	0.07	2.99	3.28
	older people Total	166	3.28	0.28	0.02	3.23	3.32
	First year	44	2.87	0.48	0.07	2.72	3.02
	Modified Second year	35	2.89	0.28	0.05	2.80	2.99
	willingness Third year	39	2.81	0.46	0.07	2.66	2.96
	to take care Fourth year	25	2.86	0.37	0.07	2.70	3.01
	of the older Internship year	23	2.75	0.39	0.08	2.58	2.91
	people Total	166	2.84	0.41	0.03	2.78	2.91
	Intention First year	44	3.04	0.42	0.06	2.91	3.16
	work with Second year	35	3.01	0.28	0.05	2.92	3.11
	older people Third year	39	2.94	0.31	0.05	2.84	3.04
	Fourth year	25	2.94	0.33	0.07	2.80	3.08
	Internship year	23	2.82	0.37	0.08	2.66	2.98
	Total	166	2.96	0.35	0.03	2.91	3.02

4.17: Description of Saudi BSN students' attitudes toward older people, their willingness to take care of older people and their intentions toward the care of older people in the kingdom at five different academic levels in three universities.

Name of Institution	Research Variables		Sum of Squares	df	Mean Square	F	P-value
Western region university	Modified Kogan Attitudes Toward the Older people	Between Groups	0.79	4	0.197	2.049	0.089
		Within Groups	21.57	224	0.096		
		Total	22.35	228			
	Modified willingness to take care of the older people	Between Groups	0.23	4	0.057	0.293	0.882
		Within Groups	43.86	224	0.196		
		Total	44.09	228			
	Intention to work with the older people	Between Groups	0.03	4	0.008	0.065	0.992
		Within Groups	28.67	224	0.128		
		Total	28.70	228			
	Modified Kogan Attitudes Toward the Older people	Between Groups	0.94	4	0.236	2.487	0.045
		Within Groups	15.73	166	0.095		
		Total	16.67	170			
Central region university	Modified willingness to take care of the older people	Between Groups	1.63	4	0.409	2.888	0.024
		Within Groups	23.49	166	0.142		
		Total	25.13	170			
	Intention to work with the older people	Between Groups	0.22	4	0.055	0.668	0.615
		Within Groups	13.69	166	0.082		
		Total	13.91	170			
	Modified Kogan Attitudes Toward the Older people	Between Groups	1.45	4	0.363	5.183	0.001
		Within Groups	11.27	161	0.070		
		Total	12.72	165			
	Modified willingness to take care of the older people	Between Groups	0.38	4	0.095	0.553	0.697
		Within Groups	27.59	161	0.171		
		Total	27.97	165			
Eastern region university	Intention to work with the older people	Between Groups	0.85	4	0.212	1.761	0.139
		Within Groups	19.39	161	0.120		
		Total	20.24	165			

4.18: One-way ANOVA test for Saudi BSN students' attitudes toward older people, their willingness to take care of older people and their intentions toward the care of older people at five different academic levels in three universities in the Kingdom of Saudi Arabia.

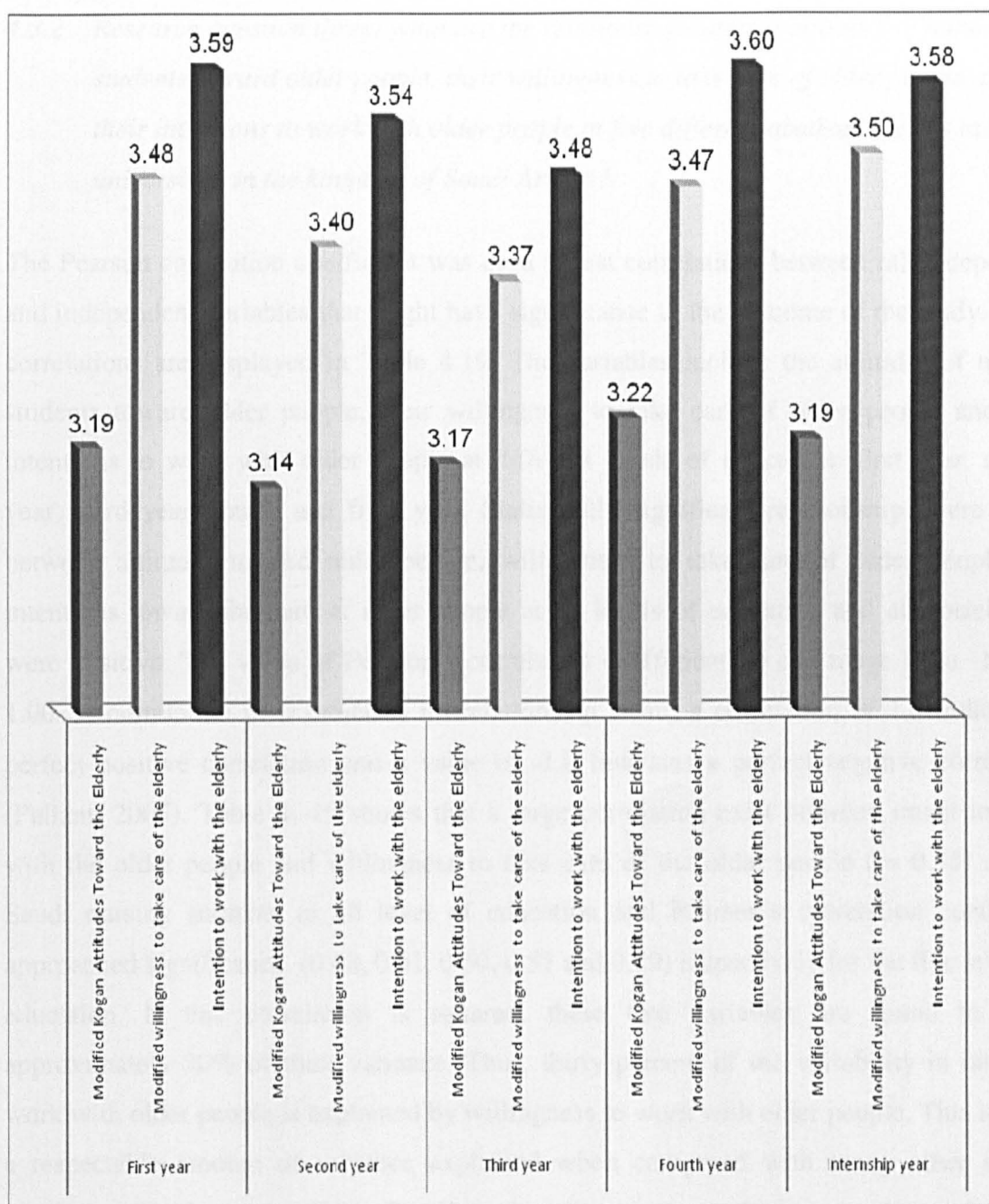


Figure 4.1: Mean scores for Saudi BSN students' attitudes toward older people, their willingness to take care of older people and their intentions toward the care of older people at five different academic levels in three universities in the kingdom of Saudi Arabia.

4.3.2 Research question three: what are the relationships among attitudes of nursing students toward older people, their willingness to take care of older people and their intentions to work with older people at five different academic levels in three universities in the kingdom of Saudi Arabia?

The Pearson correlation coefficient was used to test correlations between other dependent and independent variables that might have significance to the outcome of the study. These correlations are displayed in Table 4.19. The variables include the attitudes of nursing students toward older people, their willingness to take care of older people and their intentions to work with older people at different levels of education: first year, second year, third year, fourth and final year. Statistically significant relationships were found between attitudes toward older people, willingness to take care of older people and intentions toward the care of older people at all levels of education and all correlations were positive. The value of Pearson's correlation coefficient (r) can range from -1.00 to 1.00. A correlation of 0 indicates no relationship at all, a correlation of 1.0 indicates a perfect positive correlation and a value of -1.0 indicates a perfect negative correlation (Pallant, 2005). Table 4. 19 shows that a large correlation exist between intent to work with the older people and willingness to take care of the older people ($r= 0.55$) among Saudi nursing students in all level of education and Pearson's correlation coefficient approached significance (0.48, 0.61, 0.50, 0.57 and 0.59) respectively for the five levels of education. If this correlation is squared, these two variables are found to share approximately 30% of their variance. Thus, thirty percent of the variability in intent to work with older people is explained by willingness to work with older people. This is quite a respectable amount of variance explained when compared with many other studies conducted in the same field. Significantly, there is a moderate correlation between willingness to care for older people and attitudes toward older people, with statistically significant levels of $p<0.01$ across all levels of education and Pearson correlation coefficients of 0.32, 0.24, 0.46, 0.157 and 0.42 respectively. These results suggest that Saudi students who are willing to take care of the older people tend to have positive attitudes toward older adults. Furthermore, it is possible to get an idea of how much variance is shared by these two variables (willingness and attitude) by squaring the correlation coefficient: two variables that correlate at $r=0.32$ share only $.32^2=.10$ which, when multiplied by 100, indicates that they share 10 % of variability, suggesting that there is not much overlap between the positive attitudes of nursing students toward older people

and their willingness to take care of them. Additionally, a significant correlation was found between positive attitudes toward older adult and intent to take care of older people, and these two variables were found to share 16% of their variability. The reported Pearson correlation coefficient ($r=0.39$) indicates that there is a relationship between positive attitudes toward older people and intent to work with older people at all levels of education: for the five years of study, Pearson's correlation coefficients were 0.39, 0.27, 0.47, 0.43 and 0.41 respectively. These result revealed significant correlations between Saudi nursing students' attitudes toward older people, their willingness to care of older people and their intent to work with older people at all levels of education.

Level of education	N	Modified kogan Attitudes Toward the older people	Modified willingness to take care of the older people	Intention work with older people
First year	125	1	0.319**	0.396**
	125	0.319**	1	0.480**
	125	0.396**	0.480**	1
Second year	124	1	0.241**	0.271**
	124	0.241**	1	0.605**
	124	0.271**	0.605**	1
Third year	110	1	0.459**	0.471**
	110	0.459**	1	0.503**
	110	0.471**	0.503**	1
Fourth year	100	1	0.157	0.430**
	100	0.157	1	0.565**
	100	0.430**	0.565**	1
Internship year	107	1	0.423**	0.409**
	107	0.423**	1	0.593**
	107	0.409**	0.593**	1

*= $p < 0.005$, **= $p < 0.001$

Table 4.19: Person correlation between attitudes of nursing students toward older people, their willingness to take care of older people and their intentions to work with older people at five different academic in three universities.

4.3.4 Research question four: How are age group, care experience and work preferences among Saudi nursing students related to attitudes, willingness and intent to work with older adults as their highest or lowest work preferences after graduation?

To answer this research question, the data were examined using a descriptive statistical analysis, including the frequency distributions and percentages for work experience and preferences among nursing students. Table 4.20 indicates the distribution of Saudi nursing students who had experiences in care for older people in their nursing training: more than half (58%, n=328) had not been given the opportunity to gain experience of caring for older people during their training period at nursing school.

Practiced older people nursing care	Frequency	%
No	328	58
yes	230	40.6
missing	8	1.4
Total	566	100

Table 4.20: Saudi nursing students by older people care experience in the nursing program.

These results identified that there is insufficient focus on gerontologic nursing clinical training in the integrated gerontologic curriculum of the nursing schools.

Willingness to take care of older adults as career choice in future	Frequency	%
No	224	39.6
Yes	331	58.5
No answer	11	1.9
Total	566	100

Table 4.21: Saudi nursing students by willingness to take care of older adults as a career choice in future.

Table 4.21 shows that the majority of Saudi students were willing to take care of older people as a career choice. If Saudi nursing students are to make career decisions to work with older people, they should have the opportunity to experience the reality of working with them at nursing school and to practice nursing care with older people in different settings.

Experience of care for different age groups in nursing school	Frequency	%
Children	297	52.5
Teenagers	96	17.0
Young adults	67	11.8
Middle –Aged adults	60	10.6
Older Adult/Older people	27	4.8
Missing	19	3.4
Total	566	100

Table 4.22: Saudi nursing students by nursing experience for different age groups.

Table 4.22 illustrates the distribution of the experience of Saudi nursing students in the care of different age group in nursing school. These results indicate that nursing students in the BSN programs had less experience with care for older adults when compared with other nursing specialties such as paediatric and adult nursing.

Age group	Frequency	%	Rank
Infant (newborn to 1 year)	193	37.84	1
Preschool (2-4 year)	107	20.90	2
Young adult (20-39 years)	60	11.76	3
School age (5-12 years)	48	9.41	4
Middle adult (40-55 years)	43	8.43	5
Adolescent (13-18 years)	32	6.27	6
Older people (58-74 years)	14	2.74	7
Older adults (75+ year)	13	2.54	8
Missing	56	9.8	
Total	566	100	

Table 4.23: Saudi nursing students by work preferences in terms of patients' age groups.

This study measured nursing students' work preferences by asking them to rank their preferences for providing nursing care to patients representing eight age categories: infants to one-year-olds, pre-schoolers (2-4 years), school-age children (5-13 years), adolescents (13-19 years), young adults (20-39 years), middle-aged adults (40-55 years), the young older people (58-74 years) and very old people (75 or older). Finally, the researcher asked nursing students to state briefly the reasons for their choices of patients with whom they

most preferred and least preferred to work: these qualitative responses are analysed in the second part of the data analysis. In fact, the distribution indicated that for most of the respondents, the preferred age group was infants (37.8%, n=193), with preschool children representing the second choice of work preference (20.90 %, n=107), followed by young adults (11.76%, n=60). School age children, middle-aged adults and adolescents were the fourth, fifth and sixth preferences (9.41 %, n=48, 8.43 %, n=43 and 6.27 %, n=32) respectively. Older adults and the older people were the last work preferences among students (2.74 %, n=14 and 2.45%, n=13) respectively. In a more practical vein, in this study, previous clinical experience by was strongly interlinked with work preferences by age group. The fact that more than half of these nursing students (53 %) preferred to work with children, either infants (newborns to one year old) or those of preschool age (2-4 years) as a first and second choice might be because more than half (52.5 %) of them had more previous clinical experience with children' as shown in Table 4.23.

		Std.			
Study variables	Preferences*	N	Mean	Deviation	Rank
Modified Kogan Attitudes Toward the Older people	Infant birth to 1 year	192	3.18	0.29	7
	Preschool (2-4 years)	106	3.18	0.30	5
	School age (5 – 12 years)	48	3.25	0.38	1
	Adolescent (13 to 18 years)	31	3.18	0.21	6
	Young adult (20 – 39 years)	61	3.19	0.27	4
	Middle adult (40 – 55 years)	42	3.19	0.28	3
	Older people adult (58 – 74 years)	14	3.15	0.36	8
	Older adult (75+ years)	13	3.24	0.31	2
	Total**	507	3.19	0.30	
Modified willingness to take care of the older people	Infant birth to 1 year	192	3.48	0.58	4
	Preschool (2-4 years)	106	3.51	0.48	3
	School age (5 – 12 years)	48	3.43	0.51	6
	Adolescent (13 to 18 years)	31	3.15	0.72	8
	Young adult (20 – 39 years)	61	3.41	0.53	7
	Middle adult (40 – 55 years)	42	3.43	0.48	5
	Older people adult (58 – 74 years)	14	3.86	0.77	1
	Older adult (75+ years)	13	3.70	0.62	2
	Total**	507	3.46	0.57	
Intention to work with the older people	Infant birth to 1 year	192	3.60	0.49	4
	Preschool (2-4 years)	106	3.62	0.44	3

School age (5 – 12 years)	48	3.57	0.58	7
Adolescent (13 to 18 years)	31	3.39	0.56	8
Young adult (20 – 39 years)	61	3.59	0.43	5
Middle adult (40 – 55 years)	42	3.58	0.40	6
Older people adult (58 – 74 years)	14	3.89	0.61	1
Older adult (75+ years)	13	3.75	0.67	2
Total**	507	3.60	0.49	

* The classification for preferences was based on the first choice.

**Missing or repeated choices were eliminated, so the total is less than 566.

Table 4.24: The relationship between the work preferences of Saudi nursing students and their attitudes toward older people, willingness to take of the older people and intent to work with the older people.

To further investigate the relationship between the work preferences of Saudi students and their attitudes toward older people, willingness to take of older people and intent to care for them, the researcher focused on two age groups: older people adults (58 – 74 years) and older adults (75+ years). Table 4.24 shows that nursing students who selected work preference with the older people and older adults as a first choice held positive attitudes toward the older people (the mean score was 3.15 with a standard deviation of 0.36) and older adults (for whom the mean score was 3.24 with a standard deviation of 0.31), but these mean attitude scores were nonetheless lower when compared with other age group preferences. This result indicates that the attitudes of nursing students did not play a major role in work preferences. Interestingly, the data reveal that a majority of the students who selected care for the older people and older people as a first choice in work preference demonstrated the highest score for willingness to take care of them (3.86, with a standard deviation of 0.77 and 3.70 with a standard deviation of 0.62 respectively). Additionally, the score for intent to work with the older people was higher among students who cited work with the older people and older people as their first career choice (3.89 with a standard deviation of 0.6 and 3.57 with a standard deviation of 0.61 respectively). The results indicate that intention and willingness are the most important factors in specifying the older people as the first choice for work after graduation.

4.3.5 Research question five: What are the attitudes of nursing faculty members towards the care of older people and do they correlate with their nursing students' attitudes?

This analysis examines faculty members from three different nursing schools' attitudes towards older people (n=132) and the relationship between these scores and their students' attitudes. The survey was given to 132 faculty members, including 76 clinical instructors, 40 associate professors and 16 professors. The modified Kogan Attitudes Toward Older People (ATOP) scale was used.

Tables 4.25 shows that the nursing faculty in general had a positive attitude toward older people (M=3.36, SD 0.25) and teachers' attitudes were higher than those of their nursing students (M=3.18, SD0.29). The teachers were more mature and had attained higher levels of education than their students, which might have had a strong influence on their attitudes. An independent-samples t-test was performed to look for significant differences in attitudes between teachers and their students.

Sample	N	Mean	Std. Deviation	P- value*	Significance
Students attitudes toward older people	566	3.18	0.29		
Teachers Attitude toward older people	132	3.36	0.25		
					<0.001

* using independent sample t-test

Table 4.25: Independent sample t- test between faculty members' attitudes and nursing students' attitudes toward care of older people.

4.3.6 Research question six: *There is any relationship between nursing students' attitudes and willingness to work with older people in their religious beliefs?*

The data revealed that the majority of respondents found that significant relationship with their religion and that encouraged them to provide older people care as shown in Table 4.26. Furthermore, Tables 4.27 and 4.28 show that ANOVA and post hoc test to determine if there is any relationship between religion and attitudes with willingness toward working with older people This result indicate on emphasis of religion and strength of religious beliefs are at the core of attitudes to work with older people and willingness to take care of older people among Saudi students.

Study variables	Relationships			
	between religion and older people care	N	Mean	Std. Deviation
Modified Kogan Attitudes Toward older people	No	58	3.07	0.23
	yes	494	3.20	0.30
	Undecided	4	2.91	0.13
	Total	556	3.18	0.29
Modified willingness to take care of older people	No	58	3.22	0.46
	yes	494	3.48	0.57
	Undecided	4	2.96	0.37
	Total	556	3.45	0.57

Table 4.26: Means of respondents believed in a relationship between taking care of older people and their religious beliefs.

Study variables		Sum of Squares	df	Mean Square	F	P
Modified Kogan Attitudes Toward older people	Between Groups	1.19	2	0.59		
	Within Groups	46.63	553	0.08	7.038	0.001
	Total	47.82	555			
Modified willingness to take care of older people	Between Groups	4.45	2	2.23		
	Within Groups	173.59	553	0.31	7.088	0.001
	Total	178.04	555			

Table 4.27: ANOVA test for respondents believed in a relationship between taking care of older people and their religious beliefs.

Dependent variable	(I)	(J)	Mean Difference (I-J)	P
	relationship between work and religion	relationship between work and religion		
Modified Kogan Attitudes Toward the older people	yes	No	0.13	0.001
	yes	Undecided	0.29	0.046
Modified willingness to take care of older people	yes	No	0.26	0.001
Total	566			

Table 4.28: A post hoc test for a relationship between working with older people and their religious beliefs.

4.3.7 Research question seven: What are Saudi nurses' intentions toward working with older people comparing with British nursing students'?

This study used a scale developed by Nolan et al (2002) to measure intentions of working with older people; this scale consists of 15 items and was constructed to involve three important aspects of intentions toward work with older people. The first of these aspects is students' intentions of working with older people in general, and consist of six statements. The second aspect is students' personal disposition towards working with older people, and this concept involves four items. Finally, the third aspect refers to students' intentions of the consequences of working with older people and consists of five statements. Nursing students who participated in this study were asked for their responses to these items on a five-point Likert scale, which ranged from 'strongly agree' (5) to 'strongly disagree' (1), . However, this study revealed a generally favourable intention toward working with older people, as shown in Table 4.29.

	Strongly Agree	Agree	Natural	disagree	Strongly disagree
Statements	%	%	%	%	%
Students' perceptions of working with older people in general					
Nursing older people is a highly skilled job	31	41	12	13	3
Nursing older people is challenging and stimulating	24	48	16	9	3
Nurses work with old people because they cannot cope with high tech care	4	7	13	33	43
I think older people are really interesting to nurse	19	49	20	9	3
Nursing older people is mainly about basic care- it does not require much skill	7	15	9	44	26
The older you are the easier it is to have a good rapport with older people	14	38	18	26	5
Students' personal disposition towards work with older people					
I am really anxious / I was really anxious about my first placement with older people	10	25	42	16	7
I will definitely consider working with older people when I qualify	7	22	42	20	10
Working with older people does not appeal to me at all	10	15	32	30	14
I am really looking forward/ I really looked forward to my first placement with older people	20	42	22	11	5
Students' perceptions of the consequences of working with older people					
Once you work with old people it is difficult to get a job elsewhere	5	15	22	38	2
Nursing older people provides little satisfaction as they rarely get better	5	12	23	39	22
Working with old people has a high status	27	39	21	9	4
Work with old people is a dead-end job	4	9	17	51	19
Working with older people is not a good career move	6	9	16	45	24

Table 4.29: Saudi students' intention of working with older people (n=566).

Statement	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	B	S	B	S	B	S	B	S	B	S
	%	%	%	%	%	%	%	%	%	%
Students' perceptions of working with older people in general										
Nurses work with old people because they cannot cope with high tech care	2	4	3	7	8	13	36	33	52	43
Nursing older people is a highly skilled job	13	31	47	41	31	12	8	13	1	3
Nursing older people is challenging and stimulating	17	24	47	48	25	16	10	9	2	3
Nursing older people is mainly about basic care - it does not require much skill	2	7	8	15	8	9	49	44	33	26
The older you are the easier it is to have a good rapport with older people	3	14	14	38	16	18	46	26	22	5
I think older people are really interesting to nurse	21	19	48	49	22	20	7	9	2	4
Students' personal disposition towards work with older people										
Working with older people does not appeal to me at all	5	10	12	15	23	32	35	30	24	14
I am really looking forward/ I really looked forward to my first placement with older people	10	20	31	42	39	22	15	11	5	5
I will definitely consider working with older people when I qualify	12	7	28	22	34	42	17	20	9	10
I am really anxious / I was really anxious about my first placement with older people	3	10	13	25	24	42	39	16	21	7
Students' perceptions of the consequences of working with older people										
Working with old people has a high status	2	27	10	39	38	21	33	9	16	4
Nursing older people provides little satisfaction as they rarely get better	2	5	6	13	12	23	51	39	30	2
Working with older people is not a good career move	1	6	5	9	22	16	46	45	26	24
Once you work with old people it is difficult to get a job elsewhere	2	5	8	15	26	22	38	38	27	20
Work with old people is a dead-end job	2	4	2	9	11	17	41	51	43	19

Table 4.30: Comparison between Saudi & British nursing students toward working with older people. B= British nurse (n=718) , S=Saudi nurse (n=566).

In this study, I conducted a comparison between the intentions towards working with older people held by Saudi and British nursing student, as explored in Table 4.30. However, students' intentions to work with older people are presented in 15 items, arranged to correspond with three broad areas: perceptions of work with older people in general: personal disposition, experiences of work with older people and perceived consequences of work with older people.

A. Students' perceptions of working with older people in general:

The results of this comparison revealed similarities in responses to most of the statements about working with older people in general between Saudi nursing students (n=566) and British nursing students (n=718). Similarly, 52% of British students and 43% of Saudi students reported that they strongly disagreed with the statement that nurses work with old people because they cannot cope with high-tech care. Meanwhile, 47% of British students and 41% of Saudi students agreed that nursing older people is a highly skilled job, and 47% of British students and 48% of Saudi students agreed that nursing older people is challenging and stimulating. Similarly, 48% of British students and 49% of Saudi students agreed that older people are really interesting to nurse. Similarly, 49% of British students and 44% of Saudi students disagreed that nursing older people is mainly about basic care and does not require much skill. In contrast, 37% of Saudi students agreed, while 46% British students disagreed, that it is easier to have a good rapport with older people.

B. Students' personal disposition towards work with older people

As regards plans to work with older people in future, 35% of British students disagreed and 32.2% Saudi students were undecided about the statement that working with older people does not appeal to them at all. Similarly, 34% of British students and 41.5% of Saudi students expressed uncertainty about working with older people when they qualified, while 39% of British students disagreed and 42% of Saudi students were undecided with regard to the statement about being anxious about their first placement with older people. On the other hand, 42% of Saudi students agreed and 39% of British students were undecided about whether they were looking forward to their first placement with older people.

C. Students' perception of the consequences of working with older people

The majority of Saudi students (40%) agreed that working with older people has a high status, while 38% of British students were undecided on this issue. On the other hand, 46% of British students and 45% of Saudi students disagreed with the statement that working with older people is not a good career move. Furthermore, 41% of British students and 51% of Saudi nurses disagreed with the statement that working with old people is a dead-end job, while 51% British students and 39% of Saudi students disagreed with the statement that nursing older people provides little satisfaction, as they rarely get better. Similarly, 38% of British students and 38% of Saudi students disagreed that once you work with old people, it is difficult to get a job elsewhere. However, the cross cultural similarities in intentions towards working with older people found between British and Saudi nursing students' accounts are remarkable in several respects in the context of the global nursing profession.

Section four

4.4. Results of hypothesis Testing

In this section, each Alternative and null hypothesis is restated, and the results of the statistical test of that hypothesis are presented.

1-There is a significant difference in knowledge about ageing before and after nursing students have completed 32 weeks' clinical experience caring for older people a hospital setting.

The Facts on Ageing Quiz (FAQ2) was administered to two groups of nursing students (first years and final years) during the first week of the semester and again at the end of the year which involved 32 weeks working with older people in a hospital setting. The mean numbers of correct answers as calculated and the possible mean scores were between 0 and 24. A higher score indicates a better knowledge of physical and behavioural aspects of ageing. A paired-sample t-test was performed to determine whether or not there was a significant change in knowledge between the tests administered before and after this working experience. The results show that BSN students' knowledge of older people showed only a slight improvement after clinical experience with older people: prior to their clinical experience, students answered a mean of 48.8% of questions correctly, but after the clinical experience they answered a mean of 49.2% correctly, representing an increase of only 0.45.

Additionally, a paired sample t-test was used to determine whether or not a significant difference existed between the mean pre-experience and post-experience scores on the FAQ2. Table 4.31 shows the distribution of mean scores for pre-experience (M=175.2, SD=421.8) and post-experience ageing knowledge (M=181.04, SD=435.8). The paired sample t-test indicated that the difference in mean ageing knowledge score was not significant ($t=-1.611$, $p=0.120$, $p<0.001$): in other words, the 32 weeks' clinical experience had not significantly improved these students' knowledge of ageing. The null hypothesis was not rejected and these results revealed that clinical experience with older people may

not improve knowledge of ageing.

Using paired sample t-test, there is no significant difference in Ageing knowledge between the pre and post test scores.

Test	Mean	SD	t	P-Value
Pre test	175.20	421.77	-1.611	0.120
Post test	181.04	435.75		
Total	200			

Table 4.31: Mean Pre-Post test knowledge of ageing toward older people before and after clinical experience in a hospital setting.

2- There is a significant difference in attitudes of nursing students (first and final year) toward older people before and after completing 32 weeks' clinical experience caring for older people in a hospital setting.

A paired-sample t-test was performed on the scores for the Modified Kogan Attitudes Toward Older People (ATOP) to compare the attitudes of first-year and final-year students after clinical experience with older people in a hospital setting. Table 4.32 reports that pre-test attitudes toward older people among first-year nursing students had a mean score of 3.20 (SD=0.30). Post-test attitudes were more positive (M= 3.38, SD=0.23). Similar findings were revealed in the pre-test for final-year students: the pre-test mean was 3.20, while the post-test mean had increased to 3.27 (M=3.20, SD, 0.33) while more positive attitudes were cited in the post-test (M=3.27, SD=0.33). A paired-sample t-test was performed and revealed significant differences in attitudes between the groups ($p < 0.001$). The null hypotheses was rejected and it was concluded that there is a significant difference in the attitudes of nursing students (first and final year) toward older people before and after completing 32 weeks' clinical experience caring for older people in a hospital setting.

Level of education	Measurement		N	Mean	Std. Deviation	P-value
First year	Modified Kogan Attitudes Toward the older people	Pre	102	3.20	0.30	0.000 <0.001
		Post	102	3.38	0.23	
Final year	Modified Kogan Attitudes Toward older people	Pre	98	3.20	0.33	0.000 <0.001
		Post	98	3.27	0.26	
Total			200			

Table 4.32: Paired sample t-test examining first and final year students' attitude scores before and after contact with older people in clinical experience in a hospital setting.

3-There is no significant difference in the willingness of nursing students (first and final year) to take care of older people before and after completing 32 weeks' clinical experience caring for older people in a hospital setting.

A paired sample t-test was used to compare students' willingness to take care of older people before and after clinical experience with older people in a hospital setting. Table 4.33 reports that for first year nursing students (n=102), the mean pre-test score for willingness to care for older people was 3.53 (SD=0.56), while the mean score at post-test was higher (M= 3.94, SD=0.37). The pre-test score for final-year nursing students (n=98) was 3.50 (SD=0.55), while the post-test score was 3.80 (SD=0.42). The t-test revealed that these differences were significant both groups ($p < 0.001$). The null hypotheses was thus rejected: there is a significant difference in willingness to take care of older people among nursing students (first and final year) before and after completing 32 weeks' clinical

experience caring for older people in a hospital setting.

Level of education	Measurement		N	Mean	Std. Deviation	P-value
First year	Modified willingness to take care of older people	Pre	102	3.53	0.56	p<0.001
		Post	102	3.94	0.37	
Final year	Modified willingness to take care of older people	Pre	98	3.50	0.55	p<0.001
		Post	98	3.80	0.42	
Total			200			

Table 4.33: Paired sample t-test in to compare willingness of first-year and final-year nursing students before and after contact with older people in clinical experience in a hospital setting.

4- There is no significant difference in the intentions of nursing students (first and final year) to work with older people before and after completing 32 weeks' clinical experience caring for older people in a hospital setting.

A paired sample t-test was used to compare intentions to work with older people among first-year and final-year students before and after contact with older people in clinical experience in a hospital setting. Table 4.34 reveals that for first years (n=102), the mean pre-test score for intentions to work with older people was 3.56 (SD=0.52), while the mean post-test score was higher, at 4.0 (SD=0.39). Similarly, for final-year students (n=98), the mean pre-test score for intention to work with older people was 3.59 (SD=0.50) while the mean post-test score was higher, at 3.90 (0.30). These differences were statistically significant for both groups (p<0.001). The null hypotheses was thus rejected: there is a significant difference in intentions to work with older people among nursing students (first and final year) before and after completing 32 weeks' clinical experience caring for older

people in a hospital setting.

level of education	Measurement		N	Mean	Std. Deviation	P-value
First year	Intention to work with the older people	Pre	102	3.56	0.52	p<0.001
		Post	102	4.00	0.39	
	Intention to work with the older people	Pre	98	3.59	0.50	p<0.001
		Post	98	3.90	0.30	
Internship year						
Total	200					

Table 4.34: Paired sample t-test for intentions to work with older people for first and final year students before and after contact with older people in a hospital setting.

5. Summary

In this chapter, data results were presented. The research question and null hypothesis were restated. The results revealed that the sample of 566 nursing students from the integrated gerontologic nursing curriculum in three Saudi BSN programs displayed a lack of basic knowledge of the physical and behavioural aspects of ageing on the Facts on Ageing Quiz 2 (FAQ2). On the other hand, Saudi nursing students' attitudes toward older adults were found to be favourable and showed a highly significant correlation with the attitudes of their teachers in nursing school. Furthermore, this study shows that for the obtained sample, willingness to take care of older people was high. They also showed a strong intent to work with older people. Additionally, when a Pearson correlation coefficient was applied to these data, it revealed strong and statistically significant relationships between intent to work with the older people, willingness to take care of the older people and attitudes toward older people at all levels of education. However, a majority of the participants indicated that they would prefer not to work with older people after graduation, although the students who indicated that they would prefer to work with them had positive attitudes and the strongest willingness and intent to take care of older people. On the other hand, these data reveal the potential for clinical training experience with older adults in nursing school to improve previous variables (attitude, willingness and intention), with highly significant Pearson correlation results. The next chapter explores the qualitative analysis, discusses the students' views regarding the care of older people as a career choice, with several key themes and highlights important issues that arose during the focus group discussions with nursing teachers in the three nursing schools.

Chapter 5

Qualitative data

Caring for older people

5.1 Introduction

The aim of this chapter is to describe the qualitative findings from the open-ended questions among nursing students and focus group discussions with nursing faculty members. This study provides rich and in-depth qualitative data from both nursing students and nursing teachers who have varied experiences of care for older patients, across three nursing schools in different universities in three regions of the Kingdom of Saudi Arabia. The following open-ended questions were contained in the student questionnaire:

- 1) What are your reasons for selecting a career with older people as your most preferred choice?
- 2) Briefly give your reasons for selecting a career with older people as your least preferred choice.

These questions were used to explore Saudi nursing students' career choices and preferences towards working with older people and constitute a major section of the chapter.

The chapter also explores the findings from the focus group discussions with nursing faculty members and gives their views on teaching gerontological nursing in undergraduate nursing curricula. Insights gained from exploring these perspectives will hopefully provide signposts to the teaching of gerontological nursing in nursing schools. The following issues were covered:

6. The students' clinical experiences in nursing school with ill and well older people in hospital, nursing home and community settings.
7. Knowledge or skills among nursing students with regard to caring for older people.
8. The gerontology programme and the part played by nurse educators as role models promoting work with older people.

This chapter is divided into two main sections. The first section discusses the Saudi students' views regarding the care of older people as a career choice. Several key themes and categories emerged from the analysis of the students' responses. The responses focused on three themes, these were:

- Life experience with older people prior to entering training;
- The influence of cultural, social and religious factors;
- The influence of students' learning experiences.

The first theme, which focused on prior life experiences, was further subdivided into three categories, namely early foundations, early childhood experiences and enjoying the stories told by old people. The second theme, which encompassed cultural, social and religious factors, was further subdivided into several categories. There were coded as cultural norms, religious perspectives, dealing with death and grief and women's responsibilities within the family. Meanwhile, the factors influencing students in the context of their learning experiences fell into three categories, namely nursing clinical experience, inadequate preparation and teachers as role models. The nursing clinical experience category was further subdivided into several subcategories, namely positive and enriching experiences, negative and discouraging experiences and nursing home experiences. The second section of this chapter considers the important issues that arose during the focus group discussions with nursing teachers in the three nursing schools. Four themes emerged from these group discussions, namely clinical experiences, teaching and learning experiences, teachers' roles and bridging the gaps between theory and practice (curriculum). The clinical experience theme is further subdivided into two categories, namely nursing students' attitudes and nursing home experiences.

5.2 Caring for older people: The students' perspectives

The analysis of the qualitative data provided in response to the open-ended questions is complex, with overlapping themes and issues. These issues mainly focus on the students' views about whether they would consider care of older people as part of their future careers. I believe that it is important to explore the reasons why Saudi nursing students do or do not want to care for older people as a future career choice. Knowledge gained from exploring such perspectives may be useful in informing the development of the baccalaureate nursing curriculum in gerontology and potentially have a positive impact on health care delivery for older people in Saudi Arabia. However, the open-ended questions included in the survey do not provide unambiguous answers but they do give some potentially telling insights into nursing students' views. The issues raised include: life experiences with older people prior to nursing; cultural, social and religious factors, including family and women's responsibilities; and the influence of students' learning experiences, which are divided into positive and negative clinical experiences and nursing home experiences, as well as issues of inadequate preparation and the presence or absence of role models.

The first theme to emerge was "life experience with older people prior to nursing", which provided a foundation from which nursing students understood care for older people prior to experience in a professional context. For example, some students stated that "*living with my grandparents allows me to understand them more*" and others gained valuable experiences from listening to the stories of older people, as reflected in comments about "*hearing their stories and wisdom*". Life experiences with older people prior to nursing seem to play a part in developing positive perceptions of older people.

The second theme revealed considerations relating to cultural, social and religious factors, which similarly exerted an influence on students, as reflected in comments such as: "*our cultural values and religion require me to respect them (older people)*". More specifically, the students' views on the care of older people from the perspective of cultural norms indicated that older people are regarded with great "*admiration*" and "*respect*" and are "*spoken to in soft voices*" as important aspects of Saudi culture. Secondly, nursing students raised "religious perspectives" that required them to care for

and look after older people. This, in their view, was not limited to Islamic society only but applied to all mankind, as is clearly stated in the Quran. They mentioned “*rewards from Allah (God)*” for “*charitable acts*” and “*Rhamah*” meaning “*mercy*”. Thirdly, issues of death and grief arose, as reflected in themes related to “*terminal illness*”, “*loss and grieving*”. Meanwhile, a further category emerged, relating to family and the responsibilities of women, within which Saudi nursing students viewed the care of older people - parents and grandparents as well as older patients - as the responsibility of women. Women are still heavily influenced by their families in Saudi Arabia, as the students in the present study reflected: “*In my family, I have cared for a grandparent*” and “*As a young female I really like sitting and talking with older individuals at home*”. Consequently, cultural, social and religious factors, including family and women’s responsibilities, seemed to exert a positive influence toward older people.

On the other hand, nursing students’ responses indicated quite different learning experiences with older people in their programme. Many nursing students were able to reflect on transformational and positive learning experiences where their contact with older patients within the clinical arena was a positive and enriching experience, which “*enabled me to care for them better*” and resulted in comments such as “*I find working with them (older people) an enjoyable job.*” Conversely, many other students reflected on negative experiences and a lack of enthusiasm, and recognized the current status of gerontology as poor: “*not given me a positive outlook*”, “*boring*”, “*low status*”, “*depressing*”, “*low self esteem*”, “*unsatisfying*” and “*frustrating.*” Such negative sentiments regarding work with older people arose out of their contact with older people in a clinical setting.

To compound difficulties, the theme of “*inadequate preparation*” captured a lack of the knowledge and skills required for the care of older people among nursing students: “*I’m not well prepared*”. The last theme to emerge from the students’ perspective considered the lack of role modelling provided by qualified professional nurse educators and nursing staff in the gerontological field, captured in statements such as “*I need skilful mentors.*” All of these themes reflect nursing students’ perspectives’ and their general views of older people and their willingness, or not, to work with them in the future. The ways the themes are derived from the data is summarized in Table 5.1.

Theme	Category	Codes
Life experience prior to nursing	Early experiences with older people	<ul style="list-style-type: none"> • Experiences with grandparents • Learning from older people's stories
Role of cultural, social and religious factors	Cultural norms	<ul style="list-style-type: none"> • We value and respect older people • Culturally, older people who need support must be provided with it
	Religious factors	<ul style="list-style-type: none"> • I found care of older people rewarding from Allah (God) • Part of glorifying Allah is to respect older people • If I treat older people with respect, they return the respect
	Dealing with death and grief	<ul style="list-style-type: none"> • Cultural and religious norms, families prior experience helps to deal with death and grief
	Family and women's responsibility	<ul style="list-style-type: none"> • Care of older people is the role of women; this has shaped my experience of life and older people
3-Learning experience context	Clinical experiences	<ul style="list-style-type: none"> • I enjoyed working with older people • I can learn much from

older people's wealth of experiences

- I enjoy working with friendly older people as the best age group
- Working with older people is sometimes very basic and unsatisfying
- I think from clinical experiences with them that the job would be very boring, with no advancement, and that would eradicate my motivation as a professional nurse
- If I worked with older people in future, there would be no motivation in terms of salary or continued educational advancement and that would kill me
- I do not enjoy the nursing home environment
- I dislike nursing homes and I believe many of them are just warehouses
- I prefer not to work with older people in nursing

	homes
Inadequate preparation (lack of knowledge)	<ul style="list-style-type: none"> • I am not well prepared to work with older people • I do not know quite how to care for them • I lack the skills and knowledge to work with them in future
Lack of role modelling	<ul style="list-style-type: none"> • I need to learn from the right person • I need skilful mentors • The staff in the nursing home are not cooperative

Table 5.1: Theme development from nursing students' perspectives on the care of older people from the open-ended questions on career choice

5.2.1 Life experiences prior to nursing

A) Experiences with grandparents

The study findings revealed that life experiences with older people greatly influenced Saudi nursing students' perceptions of the care of older people. Generally baccalaureate nursing students came to know and understand older people and some of their needs through connections made with older people during their early life experiences, primarily through living with older people. Socially, the extended family system prevails in Saudi Arabia, and the vast majority of older people are living in households of four or more people. In addition, norms and traditions predominate in Saudi life, encouraging strong familial ties. In the context of living in multigenerational households with older people, some students reflected that:

"I spend interesting times with all four of my grandparents (all over 70 years old), who live with me. I love being with them generally: they are cheerful and good-humoured, and when I provide care for them it makes me happy and Allah will reward me by blessing my life" (Student nurse, 2nd year, university 1).

"I was the youngest member in my family, and because everyone was older than me, I think I grew to respect older people. I think I grew from that experience of having older people around me, which has led me to prefer to work with them" (Student nurse, 1st year, university 1).

Nursing students mentioned that these "life experience" with older people played a major role in developing the skills needed to support older people such as relationship building, taking the time to get to know older people better, listening to them, making connections and trying to understand them deeply, as one student nurse reflected:

"They are very nice people. I live with my grandparents, but I do not consider them "old people" because they are very active and alert all the time. They are sensitive and scared of senility and Alzheimer's and keep asking me how they can be healthy and avoid getting sick. I enjoy talking to them" (Student nurse, 1st year, university 3).

The Saudi nursing students who took part in this study described how they came to know and understand care for older people at an early age, prior to their nursing training. The students recounted anecdotes from early childhood experiences with older people, which seemed to provide memorable and significant foundations for their relationships with

them. Some of the students pointed out how they had learned to care for grandparents at home:

"My mum was divorced from my father 20 years ago, so when I was child I lived with my grandmother (80 years old) and she raised me: for that I respect and love her very much. I spend most of my time with her and she prays for me, but in the past six months she has been preoccupied with death and asks Allah (God) to provide peace for her" (Student nurse, 2nd year, university 2).

"As children, my grandmother watched us all the time. We live in the same house. I love be with her and I think of her when I see older ladies in the hospital' (Student nurse, 1st year, university 2).

Such early experiences also helped students to relate to older people in their care by reflecting back on their experiences with their grandparents:

"I suppose with older individuals, some of them take on grandparent characteristics. I can see my grandmother in a lot of these people, even the stubborn ones. I see a lot of similarity between my grandparents and my older patients ... I enjoy being with them and talking. I feel I give them better care because I remember my grandparents when I look at them" (Student nurse 4th year, university 2).

Some student nurses pointed out that they had learned positively from their past life experiences with older people as children, as they cared for their older grandparents, and that this helped them to foster relationships with older people. As one student wrote:

"I have had very positive experience with my grandparents since I was a child and that has made me really "respect" and prefer to work with older people in future to get rewards from Allah (God) for charitable acts" (student nurse, 1st year, university 1).

Such experiences with older people, usually grandparents, equipped several the students with skills of listening to older people, as reflected in the theme 'enjoying their stories'.

B) Learning from older peoples' stories

Some Saudi nurse students asserted that their life experiences with older people had helped them to build strong connections, as listening to stories from their grandparents provided a source of wisdom and guidance based on their experiences in various aspects of life, as the following comments reflect:

"I have an 73-year-old grandmother. I have lunch with her every week and I have found that she needs love and reassurance. It is very easy to satisfy her and understand her needs" (Student nurse, 2nd year, university 1).

"I have a wonderful grandma and I love speaking with older people, listening to their stories and wisdom: it is easy to understand them, like children" (Student nurse, 1st year, university 2).

Nursing students also reflected on the importance of listening to older adults' stories. These were perceived not only as enjoyable but also as an important way to build good relationships and learn from older people. The following quotations illustrate the family view of older people from the nursing students' perspective:

"My grandmother helped raise me. Most of my relatives are older people and I generally respect them and enjoy hearing the stories they have to tell, and I learn from their stories" (Student nurse 3rd year university 1).

Some nursing students noted that life experiences with older people had helped them to be more accepting of older people:

"I have loving and wonderful grandparents; they have influenced me the most; they are active and healthy all the time, and I love being able to talk to them and hearing their stories and wisdom" (Student nurse, 3rd year, university 2).

Some nursing students recognized from their contact with older people that some of them have special needs, and considered older people's stories and experiences as a valuable source of knowledge:

"From my experience, some older people have special needs and some of them have wonderful stories to tell and are a lot of fun, with real go; they are wiser and can teach us" (Student nurse, 1st year, university 1).

"My grandmother of 80 years old is living with us and I respect her. She has wonderful stories. I can learn from her" (student nurse, 2nd year, university 1).

In summary, these life experiences with older people outside the nursing context helped nursing students to shape their attitudes and to learn how to relate to older people. However, it needs to be noted that such contexts were, on the whole, with relatively healthy older people within the family settings. Consequently, student nurses responded most positively to those older people who could communicate easily, and had interesting life stories to relate. Students valued such stories, which enabled them to build relationships in an enjoyable way, whilst also learning from the older peoples' wisdom.

5.2.2 Cultural, social and religious factors

Cultural, social and religious factors, including family and women's responsibilities, exert great influence in Saudi society, with such influences having marked effects on the care of older people from the students' perspectives. Here I will attempt to distinguish between cultural norms and religious perspectives on the care of older people in Saudi Arabia, although the students' views sometimes reflect links between these two aspects. In fact, many Saudi cultural beliefs and norms, including those relating to the care of older people, are derived from a primarily religious perspective: for this reason, these aspects will be considered in parallel. The Islamic faith is certainly the major aspect responsible for shaping Saudi society and culture, and thus plays a significant role in nursing students' views towards the care of older people.

A) Cultural norms

The way a culture regards older people is likely to affect students' views both on older people generally and work with such individuals as a career prospect. Most of the students who took part in this study emphasised the importance of "*respect*" and the "*dignity*" of older people, this being a key element of the cultural norms that students have learned from the wider society and culture. Moreover, cultural factors were identified as significant influences on the desire to take care of older people and to respect and serve them. This was reflected in several nurse students' comments, such as the following:

"I prefer working with older people because our cultural values and beliefs require me to respect and serve them to gain a rewarding and peaceful

life” (student nurse, 1st year, university 1).

Nursing students were aware that in Saudi society, when dealing with older people, one must be more soft-spoken, humble, gentle and patient, as the culture norms dictate. There is also a duty for Muslims to pray for a cure or improvement in health, as they mentioned:

“As with younger people, the older patients vary, and their responses to illness depend more on their personality and general state of health than their age. Some just want to do what they need to do to get better, such as praying all the time; others just want to grouse and complain, but I understand how they feel because we are from the same culture, speaking one language” (student nurse, 5th year, university 2).

“I was very gentle and soft speaking with older people all the time. I think older people need support and respect” (student nurse, 5th year, university 3).

Saudi older people expect and appreciate swift responses to their needs by health professionals such as student nurses, and might label late responses as neglectful. Many students recognized and reflected on this:

“Some older people are so dependent on health care workers. It almost seems as if they would rather stay sick so that they know they will be cared for, and some of them are very bossy and expect responses to their needs very quickly. If they are not answered immediately, they complain” (student nurse, 2nd year, university 2).

Student nurses reflected on the need to be polite and respectful to older people, not calling them by their first names, as Saudi culture norms require:

“I prefer to work with older people and last week I provided care for an old lady (71 years of age) in the oncology department; I respect her and did not call her by her first name, because that is not acceptable in Saudi culture and would make her angry with me; usually I would refer to her as the mother of her oldest son” (Student nurse, 5th year, university 3).

Some respondents noted that older people prefer care from Saudi nursing students because they find it easy to communicate with them in the same language and share the same culture. This ensured a better understanding Saudi morality and cultural beliefs:

“Experience with grandparents, work in nursing homes and medical units

during school clinical training has led me to understand older people, and more especially their beliefs. Most of my experiences with them have been positive and have encouraged me as a Saudi nursing student to work with them because I understand them easily, speak the same language and am from the same culture” (student nurse, 4th year, university 2).

In Saudi culture, morality recognizes that older people should be respected, supported and treated well, because they have made significant contributions to society and now deserve the best care as payment for this debt, as students pointed out:

“From cultural and moral aspects, all older people need support and should be treated with a great deal of respect: they have given a lot to society, and now it is our turn to give back” (student nurse, 1st year, university 2).

Some nursing students recognized that their cultural background underpinned their understanding of the care of older people in the hospital as well as in nursing homes:

“I prefer to work with older people and I have learned a lot from my cultural background about how to deal with older people, which has helped me in my clinical experience working with chronic older patients in the hospital as well as in nursing homes” (student nurse, 2nd year, university 2).

As noted above, one of the major foundations of Saudi culture is the role played by religion.

B) Religious perspectives

The influence of religion was viewed as all-encompassing in the care of older people in Saudi Arabia. The nursing students believe that religion had an impact on their everyday lives, and the influence of Islam was evident in all of the narratives on every aspect of the care of older patients in Saudi Arabia. In this study, most of the participants recounted that their Islamic religious beliefs shaped their perspectives on caring for older people, encouraging them to accept the duty to care for them as payment for debt and for the sake of Allah. For some, caring for older people was part of the reward from Allah:

“I find the care of older people more rewarding from Allah (God), to give help and support in order to satisfy their needs, as my culture insists. I feel happy to support old people for the sake of Allah” (student nurse, 3rd year, university 2).

Islam, like many other religions, advocates that Saudi students should respect and value older people, and this has been illustrated in many verses in the Holy Quran (the Holy Book of Islam). Saudi nursing students' comments reflected this:

"I prefer to work with older people because the Holy Quran says, 'the Lord hath decreed that ye worship none but Him, and that ye be kind to your parents. Whether one or both of them attain old age in their life, say not to them a word of contempt, nor repel them, but address them in terms of honour. And, out of kindness, lower to them the wing of humility, and say: My Lord! Bestow on them the Mercy even as they cherished me in childhood'" (student nurse, 5th year, university 2).

These nursing students used the words "reward" and "Allah rewards", derived and dedicated from the Islamic religious perspective: "Allah" means "Almighty God", "Rahmah" means "mercy", and these sentiments encourage them to work with older people, which is seen as uplifting, involving good deeds and charitable acts, as some of them reflected:

"I have found that if you treat older people with 'rahmah', they will return that respect as rewarding good deeds. This is more pronounced in the aged and I enjoy seeing older people like my grandfather praying for me and staying active and healthy" (Student nurse, 3rd year, university 1).

Students reflected that to respect and honour older people is one of the characteristics of the Muslim community in Saudi Arabia:

"I prefer to work with older people because the noble prophet said 'part of glorifying Allah is to pay respect to older people.' He urged us to respect older people when he said: 'He is not from us who is not merciful to our young and not respectful to our elders' (Student nurse, 1st year, university 2).

"Through all aspects of my life, I have come into contact with older people as my relatives or patients, and I respect them because the care of older people is taught by my faith and it is recognized they have the same needs, wants, and personality quirks as everyone else" (Student nurse, 2nd year, university 3).

Many students reflected that the Muslim community is supposed to be kind, considerate and helpful to its older members to attain the reward of goodness; for that reason, they prefer to work with older people:

"I prefer to work with older people because the noble prophet said; 'Allah has ordered goodness in doing everything.' If any young person is kind to older people because of their age, Allah will send him someone who will be kind to him when he becomes old'" (Student nurse, 1st year, university 3).

This strong sense of faith seemed to help students to get a better understanding of issues involved in dealing with death and grief.

C) Dealing with Death and Grief

Some nursing students also talked about coming to understand dying and the experience of death from older people and how this reflected on their ability to face different situations with their older patients in the hospital with complete respect and dignity from religious and cultural perspectives. Consequently, when caring for terminally ill older people, nursing students understand that the Islamic view of death is guided by two beliefs: Allah appoints the time of death and there is life after death. Therefore, from that religious background, students were able to help older patients to face death and dying with complete dignity and peace. Nursing students reflected that older Muslim patients are expected to seek Allah's forgiveness when dying, and help with patience and prayer. This provided important insights for some students, as reflected in the following quotes:

"Caring for terminally ill older patients who share their secrets with me and their fear of dying and facing Allah (God) has made me very familiar with how they think and react in traumatic situations. That has changed my perception of the older individual" (student nurse, 3rd year, university 1).

Nursing students pointed out that terminally ill older patients often consider an illness as atonement for their sins, and death as part of a journey to meet their "Allah". Students' way of dealing with death and grief was associated with their views and experiences of the care of older people. These experiences, as learned in the context of their religion, form an important aspect of professional nursing care, and exerted considerable influence on Saudi student nurses' acceptance of caring for terminally ill older people. Some students talked about coming to understand the losses and loneliness that some of their grandparents had experienced:

"My experience with older people as a student nurse has been very positive and this experience helped me later in taking care of my two grandfathers when they were ill and dying" (Student nurse, 2nd year, university 1).

"I think for the older population, they have had to deal with grief in losing friends, families and their spouses. As a student nurse, I have found that older people need support, especially when they are terminally ill with no hope of a cure" (student nurse, 4th year, university 3).

Some of the students reflected that older people understand that illness, suffering and dying are part of life and a test from Allah and that this requires spiritual care to reduce stress and anxiety at the end of life, to help them prepare for facing a new life. Verses from the Quran are recited and they are helped to face the Qiblah (the direction towards Mecca), as this practice is very important for dying Muslim patients and their significant others:

"I care for older patients in terminal illness and I provide palliative care as a source of support, as they ask me to direct them to Qiblah and to read the Quran to gain forgiveness from Allah" (student nurse, 5th year, university 3).

"I prefer to work with older people to provide support and end of life care because I feel that this is an important aspect of humanity"(student nurse, 4th year, university 1).

In summary, in the Islamic religion, respecting older persons is an ancient custom that has survived. The eldest family members are regarded as a source of spiritual blessing, religious faith, wisdom and love in Saudi society. The care of older people from religious and cultural perspectives is one of the forms of experience by which nursing students arrive at their knowledge of older people's care, especially in dealing with concepts of death and grief. Consequently, the students reflected that end of life care is very important to older people and that it is necessary to deliver different types of support, including spiritual care, to reduce older people's anxiety about death, to help them to prepare for it and to offer purpose and meaning to their lives.

In the next part of this analysis, I will discuss the traditional role of women in the Saudi family, which has a major impact on the nursing profession and the health system in terms of the care of older people, and how this experience influences nursing students' career choices.

D) Family and women's responsibility

In Saudi Arabia, caring for older people is a family responsibility. This is usually fulfilled by the daughters of the family. There is no formal caregiver system like those found in other countries such as the United Kingdom. The extended family system dominates in Saudi Arabia and females are the accepted caregivers in the family. Most of the students in this study point out that their roles in the family involved the care of older people grandparents. This could be related to their gender as female nurses. In Arabic culture, women have traditionally remained at home to raise children and care for older people, while men went to college and university and sometimes moved long distances in search of jobs to improve their family status. In some instances, Saudi women were left with the primary responsibility for child-rearing and caring for older adults, which might have prevented them from pursuing education and employment opportunities:

"As a young female nurse, I would prefer to work with older people in future and in general I really like sitting and talking with older individuals at home" (Student nurse, 2nd year, university 1).

Cultural trends enable Saudi nursing students to accommodate the demands for care of older people - parents and grandparents as well as older patients - as the responsibility of women, and women are still heavily influenced by their families, as the students in the present study reflected:

"As a youngster, I spent a great deal of time with my beloved grandfather, whose company I enjoyed and who, I believe, made me enjoy old people all of my life" (Student nurse, 2nd year, university 3).

Family experiences with older adults took on particular personal meanings for these female Saudi nursing students, especially their experiences in their role as women. The female nursing students reflected on their experiences of caring for their grandparents and other close relatives as they conveyed empathy for the care needs of older adults. From this perspective, some of the nursing students were of the view that older people have the right to expect good care from them, and they reflected that older people were moving through the cycle of life on a continuum from conception to ageing, while undergoing developmental changes and challenges. In light of this, the nursing students reflected on

their own feelings about themselves in future as old women and how they would want to be treated by their nurses. They used these insights to ensure quality care for all their patients:

"As I have grown older, I have found that I enjoy caring for older individuals in my family because I can sympathise with their situation and I find that in caring for them, I am often asking myself, "How would I want to be treated by a nurse when I became old like them?" (Student nurse, 2nd year, university 3).

"Life is a cycle with older people. As a baby, one starts by being very dependent on another. From my experience with older people, it seems that as one gets older, one returns to a baby-like state. Seeing ageing changes reminds me of what will happen to me in old age" (Student nurse, 3rd year, university 1).

The younger generation in Saudi Arabia, including female nursing students, uphold the traditional values of the family and women's responsibility to respect old people and encourage empathy and filial responsibility. This has a significant impact on their career choices in future and encourages them to prefer to work with older people:

"From my experience they are each very different: grandparents, their friends, relative, and numerous clients, most of them are humorous with nice stories to tell and really need help and support from us as the next generation. For that reason, I would prefer to work with them in future" (student nurse, 2nd year, university 2).

The Saudi cultural foundation for older people puts a premium on personally caring for one's family and especially for women, the disabled, sick and older people. This strengthens ties within Saudi society and has a great impact on nursing students' preference to work with older people:

"In my family, I have cared for a grandparent who was bedridden, confused, and incontinent and I learnt from that." (Student nurse, 3rd year, university 1).

In summary, female nursing students' contact with older people within the family framework as an aspect of women's responsibility, including sharing, talking, listening and providing healthy advice for them, helped some of the students to see older people from a

different viewpoint. This changed their attitudes towards older people, encouraging them to respect and value their care. These experiences had a potentially significant impact on these Saudi nursing students' future career preferences towards work with older people.

However, the students raised several other important influences in their responses to the open-ended questions. One of these was their clinical experience in nursing school with older people, which was either positive and enriching, or alternatively negative and discouraging. Experiences in nursing homes were particularly relevant in the latter case. The influence of these learning experiences will be discussed in more detail in the following section.

5.3 The Influence of Learning Experience

5.3.1 Nursing Clinical experiences

The nursing students recounted their learning experiences in the clinical arena with different older people in a variety of situations, including hospitals, nursing homes and community settings. In the clinical arena, nursing students explored a range of experiences with older people: both positive and enriching experiences and discouraging and negative ones. Consequently, clinical experience with older people provided a significant influence on their concept of care for older people, especially in nursing homes. This potentially exerted a great impact on their career choices and preferences towards working with older people.

A) Positive and enriching experiences

Many nursing students were able to reflect on transformational, positive and enriching learning experiences and to recognize from their contact with older patients within the clinical arena in hospitals that care for older people has its own unique rewards:

"My experiences at the hospital have really changed my attitude toward older people. I try to pay more attention to their needs and respect them"
(student nurse, 2nd year, university 1)

"As nursing students, we can learn much from older people's wealth of experiences"(student nurse, 2nd year, university 1)

Many of the students reflected on positive predispositions toward older people, whose friendliness, pleasantness and cheerfulness were appreciated, and mentioned that patients in this age group were more grateful than other age groups for the nursing care they received:

"I enjoy working with friendly older people as the best age group because they appreciate what I do for them, even small things. They are very pleasant and cheerful" (student nurse, 5th year, university 1)

Some nursing students reflected that frequent contact with older people within the clinical area had enabled them to improve their understanding of older people to provide better care and recognize their need for loving and trusting relationships:

"At the beginning of nursing school I just worked with them as I would with any chronic patients, but this has changed through frequent contact with them and listening to them, and developing the sense that they trust me and love me" (Student nurse, 3rd year, university 2).

Nursing students mentioned that caring for older people exposed them to a variety of mental states, such as dementia and depression, enabling them to learn from a range of experiences in a positive way and understand them better. This could be very rewarding and this wealth of experience served to enrich their nursing experience and taught them how to deal with older people in the clinical arena:

"Last week I took care of an older man with dementia and this week my client was an older woman with chronic depression. She was difficult to deal with but I tried to help her. I believe that caring for "old" individuals can be rewarding and can teach us something" (Student nurse, 3rd year, university 1).

In the following extracts from the students' responses, examples are presented of nursing students identifying the most enjoyable aspects of their work with older people as compassion, empathy and consideration. Hence, close contact with older people led some of the students to be more confident and comfortable in caring for older people and changed their attitudes:

"Close contact with older people has changed my attitude. They are neat people to work with and they need compassion, empathy and consideration. I enjoyed working with them" (Student nurse, 2nd year, university 1).

"I think that gaining experience with older individuals in the hospital and just dealing with them has helped me to get to know them and their needs" (Student nurse, 3rd year, university 2).

"It was a worthwhile experience and helped me to understand caring for long-term older people such as my patient on the medical ward, a CVA¹ patient" (Student nurse, 3rd year, university 1).

Nursing students reflected that working with older people could be enjoyable, especially when they got to know their personalities better through experience and contact with them:

"I have found out more about their personalities and experiences and got to know them a little bit better. This has enabled me to care for them better and now I find working with them an enjoyable job" (Student nurse, 3rd year, university 2).

"Contact with older people in clinical experience was very interesting, and I learnt a lot about basic nursing care and the treatment of older patients as individuals" (Student nurse, 2nd year, university 3).

These positive and enriching experiences with older people had helped some of the respondents, who saw working with them as challenging but rewarding. They therefore tended to favour this type of work as a future career:

"As a student nurse, I enjoy my work with older persons very much as a challenge and I am able to help some of them with ease" (Student nurse, 5th year, university 3).

Furthermore, respondents felt that positive experiences with healthy older patients in nursing training, such as in a community setting, might influence their career choices towards older people. Exposing nursing students to older adults in the community who were functioning well and contributing to society could have a favourable effect on nursing students' views, as reflected in the following quotes:

"I have a positive and wonderful attitude toward older people from my past experience with healthy older people in the community setting, teaching them health promotion habits" (student nurse, 2nd year, university 3).

"I have learned a lot from my experience with older people and I have

spent interesting time engaged with their conversation and their questions, especially in community settings” (student nurse 2nd year university 3).

In summary, the present study has revealed that introducing students to a variety of clinical settings with ill and well older people can have a positive effect in enriching their experiences with this group, which can affect their subsequent career choices. The students reflected that exposure to positive experiences had enhanced their ability to provide care and to understand a wide range of functional abilities and mental states amongst older people. Their responses indicated that such clinical opportunities with older people could serve as positive and rewarding experiences and could encourage them to view working with older people as a challenging opportunity, especially when their contact with older people within clinical nursing training was increased. There was an emphasis on the rewarding aspect of caring for older people during clinical training, which can foster more positive, interesting and enriched experiences in older patient care among nursing students. Conversely, the next section will illustrate more negative experiences and a consequent lack of enthusiasm for the care of older people from the nursing students’ perspectives.

B) Negative experiences and a lack of enthusiasm for work with older people

Some students reflected that negative experiences with ill and cognitively disabled older patients during nursing care could result in a negative view of such work. For some, these negative views were not due to older people themselves but rather to the status of gerontology as a career, with its perceived lack of satisfaction, poor professional advancement and lack of special technical skills in technology, compared with other specialties such as intensive care nursing. Students wanted something different and exciting:

“I have volunteered in a nursing home since I was 16 years old, only in the mornings, and in my clinical experience, working with older people is sometimes very basic and unsatisfying, because it does not deal with technology like ICU nursing” (Student nurse, 5th year, university 1).

Some students mentioned that they would not like to work with older people, not because of negative attitudes towards older people (they still value them) but because they had found their clinical experience "boring" and saw it as a dead-end job; such factors shaped levels of satisfaction and motivation to work with older people and are essential influences

on future career choices:

"I like them (older people) but I would prefer not to work as a geriatric nurse in the future. I think from clinical experiences with them that the job would be very boring, with no advancement, and that would eradicate my motivation as a professional nurse" (Student nurse, 4th year, university 2)

Some students reflected that jobs with older people were not attractive to them as future career option due to a perceived lack of motivation and status, the absence of continued professional education and low salaries. They also regarded such work as lacking in ambition for the future:

"If I worked with older people in future, there would be no motivation in terms of salary or continued educational advancement and that would kill me" (student nurse, 4th year, university 2).

Students expressed negative feelings such as a sense of "powerlessness" and "guilt" in association with the responsibilities involved in the care of older people; they saw it as a difficult option, especially with regard to patients with whom it was hard to communicate, such as dementia patients. Mental status was seen as important for nurse-patient communication:

"I find it hard to provide nursing care for older persons, especially those who cannot communicate; I worked with a dementia patient, and it was difficult to get information and communicate with him" (Student nurse 2nd year university 2).

Students reflected that they sometimes felt sorry for older people, and were frustrated when they were unable to meet certain needs of older patients in nursing practice. For example, one nurse recalled a situation when she had terminated a conversation with an older patient when she could not understand what the patient was trying to say:

"I feel sorry for them (older people) and their needs represent a big responsibility. I found it difficult to communicate with them in my nursing clinical experience, to obtain their history and conduct assessments" (student nurse 2nd university 2).

For some nurses, work with older people presented major challenges and difficulties associated with their extensive care needs, especially when caring for older people with special requirements, such as deaf people and stroke patients:

"Older people sometimes can't hear me. I feel that working with them in the future will be a big challenge for me" (Student nurse, 2nd year, university 2)

"It would be challenging and satisfying to look after older people even though it may be difficult, such as with stroke patients" (student nurse, 4th year, university 3)

Some respondents also indicated that they did not appreciate demanding and complaining older patients, reflecting that older people need relatively more care than other age groups due to changes that occur as part of the ageing process. They are sometimes slow in movement and extremely demanding, needing a great deal of care. Some nurse students admitted that they would "struggle" to accomplish their tasks:

"Older people need more care and have more complicated needs than other age groups" (student nurse, 4th year, university 1)

"In my clinical experience, I have found that older people are slow to move, so it is hard to take care of them, especially when you are busy with other chronic patients and they want to talk and tell stories" (student nurse, 4th year, university 2)

Some students reported mixed reactions to the care of older people, indicating that they struggled with the perceived undesirable characteristics of this type of work but were nevertheless willing to "have a go".

"I always had the sense that it was a struggle to provide care for older people, but if they need me I will help them" (Student nurse, 3rd year, university 2)

Other nursing students found working with older people emotionally taxing, and some mentioned that the poor prognoses associated with this type of work led to a lack of job satisfaction, especially when they had less chance for recovery compared with adult patients:

"Working with older people emotionally upset me, especially when there is less chance of recovery, not like with adults, where you can see progression" (student nurse, 3rd year university 3).

"My general impression of geriatric work is one of apprehension, i.e. death, grumpy, incontinent patients. Not much job satisfaction" (student nurse, 5th year, university 1).

Some students considered that the rewards received from nursing were mainly to do with seeing patients recover and go home, but that this was less obvious in the care of older people:

"Working with a number of confused and incontinent older patients in the hospital broke my heart and has not given me a positive outlook at all because they stay in hospital for a long time and they cannot go home" (Student nurse, 3rd year, university 1).

"I want to work with patients that I can really help to recover and go home, instead of making them comfortable in the last few months of life" (Student nurse, 2nd year, university 1).

"There is less hope of recovery in older patients and in many cases older patients spend the rest of their lives in the hospital" (student nurse, 4th year, university 1).

In summary, from their clinical training experiences, nursing students' views of the care of older people were varied. Some reflected that negative and discouraging experiences had put them off working with older people, despite the fact that they still loved them and had positive attitudes towards them. This was often due to the low prestige of gerontology as a career, as well as the low salaries in this field and the lack of motivation and scope for professional enhancement and continued education. Interestingly, the data reveal that attitude to older people was not the only factor affecting career choice among Saudi nursing students: other important factors had greater influences on their career choices, such as level of satisfaction, motivation, financial rewards and the potential for continuing professional education. Furthermore, student nurses responded that caring for older patients was a difficult and challenging job, especially with regard to those older patients with special needs such as dementia and deafness that interfered with their ability to communicate easily. Some students had problems communicating with confused patients, and this led some of them to feel sorry and frustrated because they were not able to manage such patients effectively. Some students also expressed apprehension and sadness about working with older people, especially those with little chance to recover and go

home. All these negative experiences in the clinical arena with older people, including the status of gerontology, served to turn some of them away from working with older people despite their positive attitudes towards older people themselves. The next part will discuss nursing home experiences from students' perspectives.

C) Nursing home experiences

In Saudi Arabia, nursing homes are often very basic, and are not interesting or stimulating environments for training student nurses, as reflected in this study. There is a lack of substantive orientation in nursing homes, and nursing students reflected that their disinterest in working with older people was often associated with their decisions not to work in nursing homes:

"I do not enjoy the nursing home environment, especially morning and feeding care, and for that reason I would prefer not to work with older people" (student nurse, 3rd year, university 1).

"I prefer not to work with older people in nursing home because I expect a lot of mopping up will have to be done" (student nurse, 3rd year, university 3).

Some nursing students associated working with older people with working in nursing homes, and such experiences clearly had a great impact on their views towards working with older people as a career choice, as reflected in comments such as this one:

"Through clinical experience at nursing homes, I have tended to shy away from the older population and I do not how to communicate with them; for that reason, I don't work want to with them in future" (student nurse, 3rd year, university 1).

Some nursing students expressed the view that nursing homes were like warehouses for lonely older people and they felt that older people deserved better. They called for major changes to the conditions in nursing homes to attract them to work with older people in future:

"I dislike nursing homes and I believe many of them are just warehouses for lonely and lost older people. I feel they deserve better care, and I know I could never work in a nursing home unless major changes were made" (Student nurse, 5th year, university 2).

One student recounted that her mother's experience of working in a nursing home had given her a negative outlook on working in this environment because of the poor conditions:

"My mother has worked in a nursing home for 15 years and she has encouraged me not to work in the same place" (Student nurse, 5th year, university 2)

From their clinical training experience in nursing homes, some respondents felt that caring for older people involved only basic cleaning and feeding and would lead to low self-esteem and a sense of being in a low-status, dead-end job. They also feared boredom from working in nursing homes, which was cited as a further reason for not wanting to work with older people. Such work was not seen as offering a promising future, as the following quote reveals:

"My clinical experience in nursing homes, cleaning and feeding older people most of the time, has affected my view toward working with older people as a career choice in future and I feel that I would have a useless and hopeless future if I worked in a nursing home with older people" (Student nurse, 3rd year, university 2).

In conclusion, this sub-section has discussed how clinical experiences with older people enabled some students to develop positive relationships with older people and to understand them more deeply, and these positive and enriching experiences encouraged these students to accept caring for older people as a future career choice. In such cases clinical contact with older people had helped some students to focus on the positive aspects of such work and had enhanced their positive attitudes towards gerontological nursing. Conversely, some nursing students had far more negative and discouraging experiences, usually not stemming from older people themselves but rather from the poor status of gerontology as a career, with its perceived lack of motivation, low financial rewards and absence of continued professional education. This has led some of the respondents to regard such work as dissatisfying and as a dead-end job. Similarly, the situation in nursing homes, which persists despite their promise to offer optimum care for older people in Saudi Arabia, has put some students off working with older people, as they link working with older people with working in nursing homes. Interestingly, some nursing students indicated that they would be willing to work with older people if there were major changes to the conditions in nursing homes. Nonetheless, many respondents remained reluctant to care for older people because they felt powerless to change things

and inadequately prepared to provide the best care for these people. This theme will be discussed more fully in the next sub-section.

5.3.2 Inadequate preparation for work with older people

This section considers the limited attention given to knowledge of older people and the skills needed to care for them in the students' training. Most of the nursing students maintained that there was a lack of information about the care of older people, and they found it difficult to relate the limited theory they had to practice. Some of them struggled and worried about their limited understanding of the needs of older patients because there was a gap in the knowledge and skills taught in nursing schools. This in turn led some students to feel powerless and anxious about the quality of the care they would provide to older people:

"I'm not well prepared to work with older people; I do not know quite how to care for them" (student nurse, 3rd year, university 2).

"I lack the skills and knowledge to work with them in future" (student nurse, 2nd year, university 3).

Nursing students' inadequate preparation for work with older people is reflected in their lack of accurate knowledge of ageing, which led some of them to express considerable anxiety about ageing and their ability to provide the quality of care they would like to deliver:

"I have a positive attitude towards older people but it tends to be more difficult to look after them in the clinical arena because they usually need more awareness and skills and I lack appropriate knowledge in how to care for them" (Student nurse, 2nd year, university 3).

"One day I was preparing a hot water bottle for an older lady and I used very hot water, the same as I would use for an adult, and it burned her skin; she started to scream and shout at me, calling me "dull and stupid", and that damaged my self esteem and left me anxious about working with them" (Student nurse, 2nd year, university 3).

This incident graphically illustrates that inadequate preparation of nursing students can lead to them experiencing a sense of inadequacy when caring for older people which can affect their desire to work with older people in the future, as the following quote reflects:

"I don't want to work with older people in the hospital because I'm afraid to work with them. I do not have enough knowledge and skills to provide better care for them" (Student nurse, 3rd year, university 1)

Nursing students recognized that older people have special needs and they were not confident in their own knowledge of what they had to do. Consequently their feelings of competence were often undermined:

"All older people have extraordinary needs. I wish I knew how to meet these needs and was more aware of them" (Student nurse 3rd year university 2)

Inadequate preparation in terms of knowledge and skills can lead to feelings of powerlessness and incompetence. Thus, it is essential to evaluate nurses' clinical skills and to give positive feedback, which plays an important role in motivating students and ensuring the quality and appropriateness of their learning programme. Many students expressed their sense of powerlessness, using terms such as "frustrating", "not feeling competent", "inadequately prepared" and "struggle", when they were unable to meet certain patient needs. The following quotes illustrate such feelings:

"Taking care of older people can be very frustrating sometimes. Explaining and teaching can be difficult and calls for knowledge and experience. For that reason, I don't feel competent to work with them" (Student nurse, 4th year, university 1).

"I felt inadequately prepared to provide the competent nursing care that they deserve" (Student nurse, 3rd year, university 2).

Many students felt that older patients were seen very much as an unknown, due to their lack of knowledge and skills in caring for them. Students expressed concern at not knowing what it would be like to provide care for older people; consequently, they were sometimes unsure how to respond:

"I don't know if I would have the patience in dealing with older people ...I have little knowledge and skills" (student nurse, 4th year university 3).

"I don't want to work with older people in future because I'm not aware of what has happened to them" (student nurse, 3rd year, university 3).

"I am unsure of what will be involved in caring for older patients" (student nurse, 2nd year, university 1).

Students reflected that they had insufficient skills and basic knowledge about theory, such as the vital signs of older people, and they clearly would have valued more:

"If I were to work with them, I would need to know more about gerontology nursing to understand what is normal and abnormal in this ageing stage" (Student nurse, 2nd year, university 2)

"I'm still anxious and confused about the normal range for vital signs in old age. I do not have enough knowledge and skills in that field; thus, I do not want to work in geriatrics" (Student nurse, 2nd year, university 2)

Some students stated that they were scared to talk to older people due to a lack of knowledge about how to approach them and poor communication skills with older people. Limited conversational abilities were noted by many nurses: when trying to converse with patients, the nurses would find themselves in situations where their conversational skills were wholly inadequate:

"I feel scared to talk and contact them; I need to know how I will communicate with them better as a professional nurse" (Student nurse, 1st year, university 2)

Students suggested that schools of nursing should include gerontology courses in their curricula and that they must be provided with positive clinical experience:

"We would prefer our school to include courses on the care of older people in the nursing curriculum to improve our knowledge and skills in gerontology nursing" (student nurse, 5th year, university 1)

Another important factor to emerge from the questionnaire data was the lack of appropriate role models for students.

5.3.3 Lack of role modelling

In this study some students mentioned that their nursing faculty members and their teachers were the most significant role models for demonstrating specific professional values to students. Such individuals had experience in gerontologic nursing and sought to encourage students towards this speciality. The students claimed nursing educators and staff nurses were key elements in nurturing their career choices towards older people. However, many nursing students mentioned that there was a lack of good gerontologic

nursing mentors and preceptors in the clinical arena. This was reflected in the difficulties they encountered in adapting to this area of clinical work, which had a significant influence on their future career preferences:

"I need to learn how to care for older adults from the right people. I need skilful mentors to teach me how to provide good care so that I will be satisfied and confident when I work with them in future" (Student nurse, 2nd year, university 3).

When student nurses are in learning environments such as hospitals, they interact mainly with staff nurses, and witness the role of a nurse through observing the behaviours of these individuals. Consequently, staff nurses need to be aware of their own behaviour towards older people and how these can influence student nurses' attitudes toward older people. Care is needed to avoid conveying negative attitudes toward ageing. In the present study, the student nurses' responses reflected varying experiences in older adult settings, some of which could have had the effect of turning them away from gerontology as a speciality:

"I think care of older adults needs respect. It can be great dealing with them and we can learn a great deal from them ...I remember when I was in the oncology department shadowing my preceptor tutor nurse, I observed how she dealt with an older patient: she ignored her patient totally and instead of talking to her, she talked to her son at home. The older lady was very interested to hear for herself but she was not being addressed and that broke my heart" (Student nurse, 3rd year, university 2).

Some students reported that they did not enjoy working with older people partly because nursing home staff sometimes made the students feel "unwelcome" and there had been "a bad atmosphere":

"The staff in the nursing home are not cooperative: they neglect us. I feel a bad atmosphere, and I will not work with older people as a future career" (Student nurse, 2nd year, university 2).

According to the students, the quality of care for older people varied markedly between different units, depending largely on the staff nurses. Students commented on the lack of professionalism in the care of older people and on the negative attitudes of some staff nurses, who believed that they were, "upset, irritable, angry and noisy people." This led the nursing students to feel that they were not able to use their professional skills to do their best for older people:

"I worked with older people in a medical unit. I developed a good relationship with these people and I respected them. But when I talked to the staff nurse assigned to them, I found her very upset, irritable and angry about their demands. It was frustrating for her and she saw them as noisy people. I came away from that situation thinking. "I wouldn't want to behave that way about these people or give up on people out of frustration when I work with them in future...they still need our care, still need our help" (student nurse, 3rd year, university 1).

5.4 Summary

In conclusion, the nursing students who responded to the open-ended question expressed a variety of experiences and thoughts about the care of older people, which provided a wealth of rich data. These qualitative findings reflect students' ambivalence, with both positive and negative experiences with older people as relatives and patients, all of which have significant impacts on Saudi nursing students' desires to work with older people in the future. The Saudi nursing students' narratives provide rich sources of information about caring for older people within a complex domain of inquiry. The qualitative results reflect three themes and several categories that have emerged from nursing students' responses to the open-ended question about their future work preferences with older people.

The first theme to emerge was the "life experiences prior to nursing" theme, which includes two sub-categories: early childhood experience and enjoying their stories. The second theme relates to cultural, social and religious issues and includes cultural norms, religious aspects, dealing with death and grief and family and women's responsibility. Interestingly, with regard to cultural, social and religious considerations, unique preferences and challenges in services to older people were brought up by the nursing students. Family and the responsibilities of women play a major role in female Saudi nursing students' perceptions: they were raised and have lived in this culture and learnt in its educational system, which has influenced and shaped their desire to provide care for older people. Cultural, social and religious issues, family and women's responsibility exerted largely positive views on older people in general that students bring to bear in their training. However, these positive views were either reinforced or negated by students' experiences in training, especially in the clinical setting.

The theme of learning experiences concerned issues of clinical training experience, inadequate preparation and role models. Here conflicting and ambivalent findings could be identified. Some of the students saw working with older people as a positive and enriching experience. On the other hand, others saw the care of older people as "boring", "low status" and "depressing", leading to "low self esteem" and "frustration." These sentiments were usually not due to older people themselves, but reflected the status of gerontology as a career. Therefore, despite the fact that many of the students had positive attitudes and expressed a great love of older people, and would consider working with them in the future if the situation improved, this was insufficient to overcome negative experiences in the clinical area. Such negative experiences with older people were exacerbated by inadequate preparation, leading to a limited knowledge and skills, compounded by a lack of role modelling from qualified professional nurse educators and nursing staff in the gerontological field. Hence, many nursing students saw work with older people as a constraint and a barrier to an otherwise bright future.

The results of this qualitative data analysis highlight the need for greater effort in the preparation of nursing students, with the provision of integrated skills and knowledge in the care of older people. Additionally, the nursing students emphasised that qualified teachers should be provided in nursing schools as positive role models in the care of older people. These themes and categories deserve consideration in their own right and should be focal concerns in the design of appropriate gerontologic nursing educational programmes. In light of this, several nursing students suggested that schools of nursing should include gerontology courses in their curricula and that they must be provided with positive clinical experience with both well and ill older people to encourage interest in this increasingly important specialization. The next section addresses some of these issues in more detail, drawing on an analysis of the focus group discussions with nursing faculty members.

5.5 Caring for older people: teachers' perspectives

As gerontological education in nursing programmes is considered a “new” field in Saudi Arabia, educators are facing several challenges, as was highlighted in the focus group discussions, from which several themes emerged. The first theme identified some of the challenges faced in nursing schools and is labelled “clinical experience” with older people. This included two sub-categories: “nursing students’ attitudes” toward older people and “nursing home experiences”. With regard to attitude, the groups reflected on the potential for clinical experiences to change nursing students’ attitudes and emphasized the importance of them acquiring knowledge on ageing in gerontology nursing, especially in the community setting:

“Students must be exposed to well older people in the community to change their views towards older people in order to improve their knowledge and attitudes and encourage them to select future careers with older people”.

With respect to clinical experiences, particular emphasis was placed on that gained in nursing homes. It was acknowledged that there were insufficient well-prepared nursing homes to participate effectively in clinical training, and this had a significant impact on nursing students’ desire to work with older people. Nurse educators reflected that: *“our current nursing homes are not well prepared for nursing students’ training”.*

The second theme that was identified related to “Teaching and learning experience” such as teaching students about health promotion with older people to reduce “task oriented” teaching methods and focus on “relationship oriented” approaches with older people:

“We need to minimise the task-oriented method of teaching and shift to relationship-oriented methods of care for older people ” and “these educational experiences will enhance teachers’ ability to work with students in the classroom as well as in the clinical arena”.

The third theme to emerge from the focus group discussions concerned the “teachers’ role”, with there being recognition that nursing students need role models such as nursing educators and staff nurses in their educational and practice settings. Such individuals should be enthusiastic about the care of older people: *“Nursing students need expert role models who prefer to work with older individuals as clinical instructors during clinical practice”.*

The final theme that the nurse educators talked about focused on “bridging the gap between theory and practice” (curriculum), reflecting the need to apply and articulate theoretical knowledge within clinical practice settings: *“a strong need for a core curriculum in gerontology to bridge the gap between theories and practice”* and *“Nursing students should have the opportunity to interact with the theoretical content of ageing in clinical experience”*. These themes and categories are now considered in turn, and are summarised in Table 5.2.

Theme	Category	Illustrates
Clinical experiences	Nursing students' attitudes	<ul style="list-style-type: none"> • Positive clinical experiences can change nursing students' knowledge and attitudes toward older people. • Students must be exposed to well older people in the community to change their attitudes towards and knowledge of older people.
	Nursing homes	<ul style="list-style-type: none"> • Our current nursing homes are not well prepared for nursing students' training. • Nursing homes in Saudi are still in the early stages of development. • Nursing students need good quality nursing homes for clinical training.
Teaching and learning		<ul style="list-style-type: none"> • A well planned curriculum is essential, with experiential learning to help students to improve quality care for older people. • Helping students to feel confident about interacting with older people is important. • Using different approaches in the teaching and learning process with regard to the care of older people
Teacher's role		<ul style="list-style-type: none"> • Nursing students need expert role models. • We are short of staff. • Nursing schools need qualified teachers to teach nursing students both in the classroom and in the clinical arena.
Bridging the gap between theory and practice (Curriculum)		<ul style="list-style-type: none"> • There is a need for a core curriculum in gerontology. • We need some evidence to supports the adoption of one curriculum design over another.

Table 5.2: Theme development from teachers' perspectives on the care of older people from focus group discussions.

5.5.1 Clinical training (experience)

A) Nursing students' attitudes

The participants in the focus groups believed that positive clinical experiences with well and ill older people would increase students' self-confidence, and improve their attitudes towards work with older people. This required knowledge of illness in older people and support from appropriate mentors:

"Nursing students need to know how older people manifest disease symptoms differently than younger people, and that can improve their attitudes because they can understand them better in the clinical area with role model teachers" Group 2:NT5

The groups reflected on the potential for students' clinical experiences to change their attitudes. However, to do so they saw it as essential that students had the necessary knowledge and skills:

"Some nursing students do not have sufficient knowledge of the ageing process and cannot communicate well with older people in the clinical arena due to a lack of knowledge of factors such as poor hearing in older individuals, and that might affect their behaviours and sometimes lead to negative attitudes" Group1:NT2

Moreover, the focus group participants criticized ageist stereotyping of older people among some nursing students and argued that it could potentially lead to nursing malpractice and neglect of older people due to students' frustration about their inability to provide good care. This would in turn lead to a shortage of nurses in gerontology because students would have little desire to work with older adults in the future:

"Student nurses need to be exposed to real situations and get to know older adults more in the clinical arena. Some of them feel frustrated and depressed when they have to care for older people and some ignore older people's needs because they don't know how to provide for them". Group 3:NT5

The focus groups emphasised that nurse educators must make greater efforts to increase students' knowledge of ageing to reduce stereotypical attitudes and approaches to work with older people:

"One day, a nursing student in the clinical arena told me: I don't want to

work with older people as a career because I have no experience of caring for older patients during my nursing training, So I feel I would not provide the best nursing care and I find it difficult to deal with them; I don't know exactly what their needs are. They need more skills than I have in order to give them the best care." Group 1:NT4

The group highlighted the potential value of good relationships between older patients and students in the clinical area in encouraging a positive attitude toward older people. Students need to be helped to move beyond stereotypical attitudes to more empathetic and affective relationships:

"Students' relationships with older people are very important in understanding their needs in the clinical area...as teachers must emphasise and assist them in that concept during their clinical training with older people to encourage more positive attitudes." Group2:NT6

Nurse educators suggested that current nursing programmes only used acute and long-term care settings to promote clinical experience with older people. They believed that this might affect their attitudes because most students only saw dependent and ill older individuals. Nursing programmes should place more emphasis on the contributions of healthy and productive older people in community settings:

"The wellness-illness continuum will help student nurses to view older individuals as whole in health experiences that exist regardless of the presence or absence of illness." Group 2:NT4

"In the clinical arena, in a community setting, one nursing student asked an older woman the same questions many times, but the woman couldn't hear her and did not respond. The student started to cry and asked me to change her patient because she found it so hard to communicate with this older lady. She said 'I love older persons but I do not want to take care of them because I do not know how to communicate with them...I'm not qualified to take care of older people.'" Group 3:NT4

There was a belief that greater knowledge and positive attitudes gained from clinical experiences in the community setting with healthy older people would give the student nurses more confidence and encourage them to select Gerontological nursing as a future career:

"Nursing schools should include geriatrics lectures in the community nursing course about healthy older people. Students must be exposed to

well older people in the community to change their views towards older people in order to improve their knowledge and attitudes and encourage them to select future careers with older people.” Group3:NT1

The groups considered that problems with gerontological education arise not only from the content and the lack of knowledge and skills in nursing programmes but also from the limited opportunities that students had to be brought into contact with well older people in the clinical arena. The majority of students’ experiences are with ill and frail older patients, and this might adversely affect their attitudes toward such individuals. The groups proposed that one way of improving students’ attitudes toward older people was to provide them with opportunities to engage in positive and pleasant experiences. In such instances nursing students would have the chance to observe positive outcomes from their efforts. A greater emphasis on both well and ill older adults throughout education programmes can foster more positive attitudes toward the care of older people among nursing students. However, this currently did not occur and problems were exacerbated by students’ experiences in nursing homes.

B) Nursing home experiences

The teachers recognized that current clinical experience with older people in nursing homes in their training programme was inadequate, with there being insufficient well-prepared nursing homes. This had a significant impact on nursing students’ desire to work with older people:

“There are limited health services and resources available for older people in Saudi Arabia, such as well-designed nursing homes, which makes it difficult for students to gain positive clinical experience with older individuals, and this might affect students’ clinical experience and their attitudes towards elder care” Group1:NT3

Some faculty members mentioned that clinical experiences with older people in nursing homes were "dull" and "boring" compared with other units such as the ICU:

“I do not like to take students to a nursing home because it is boring and dull: not as exciting as intensive care units” Group2:NT4

Currently high quality, professionally run nursing homes for older people in Saudi Arabia are relatively rare, although they are expected to grow significantly in numbers in the coming years. However, there will also need to be a change in societal attitudes towards

nursing homes, which are currently not viewed positively:

"Due to family ties as an element of our faith and culture, nursing home settings are rare in Saudi society and our current nursing homes are not well prepared for nursing students' training. This might affect their attitudes towards the care of older people and turn them away from gerontology specialties." Group 3:NT1

"Nursing homes in Saudi are still in their early stages of development, and that might affect students' attitudes because there is nowhere in the clinical arena to practice what they learn about the care of older people at nursing school". Group1:NT3

The group participants argued that the current status of nursing homes is poor, meaning that they are not ideal environments for teaching purposes, particularly given often poor working conditions, inadequate staffing and high staff turnover. Exposing nursing students to this type of situation early in their training was seen to negatively affect their perceptions of work with older people. However, some clinical faculty members have tried to work closely with nursing home staff to try and overcome some of the problems encountered by students:

"Nursing students need good quality nursing homes and skilful clinical demonstration to learn proper care of older people to improve their attitudes". Group 2:T5

Whilst recognizing the importance of clinical experience, educators also appreciated the need for better educational preparation of students.

5.5.2 Students' teaching and learning experiences

The groups argued that there was a need for wider use of experiential learning methods in the students programme that promoted a "relationship orientated" rather than "task oriented" approach to care. In teaching the care of older people, they argued for the use of stories, diaries, reflective approaches and audiovisual materials.

With regard to the subject matter there was much discussion around the teaching of health promotion to older people, how to complete functional and physical assessments of older people and encouraging students to visit service agencies for older people during their

clinical training. These experiential forms of learning were seen to facilitate the teaching of gerontological content in the classroom as well as in the clinical arena:

“The community courses need to include lectures on health promotion for older people, including complete information on function and physical assessment with practical training in the special agencies for older people: this will enhance teaching and learning experiences and the ability to work with students in the classroom as well as in the clinical arena” Group 2:NT3

With regard to experiential learning, the faculty teachers stressed that when nursing students visit older people in community settings and in long-term care facilities, it is very important to provide opportunities for them to develop personal relationships to improve their perceptions of older people. To achieve this, it was believed that students need to spend more time with older people; the teachers mentioned that some students feel "proud" when older people wish to establish relationships with them, but their contact time with older people is very limited:

“When older people sought a relationship with nursing students, the students felt proud of the contact, but their period of education with older people is very short” Group3:NT3

The group participants suggested reducing “task oriented” teaching methods, and focusing instead on “relationship oriented” teaching with older people to meet patients’ needs and enhance communication with older people:

“We need to minimise the task orientation method of teaching with older people because task orientation is a barrier to the development of personal relationships with older people among nursing students” Group3:NT4

The teachers pointed out that Gerontological teaching should provide students with real-life experiences. This is essential if students are to explore their feelings about older people and build relationships with them. Therefore, providing enough contact time and talking about healthy lifestyles and health promotion can only enhance the teaching and learning experience:

"Some nursing students may not have experienced close relationships with older people in the past, so the curriculum must be restructured to be more relationship oriented - not, as is currently the case, task oriented - in order to help students to feel confident about interacting with older people."
Group 2:NT1

The group participants proposed that effective communication with older people was an increasingly important area for nurse educators to focus on. The groups emphasised that the quality of nursing care provided is in large part dependent on the quality of the relationship that a nurse is able to establish with an older patient. Graduates of the future will care for a high proportion of older people in clinical settings; it is thus vitally important that nursing curricula include structured experiences which gradually introduce students to positive interactions with older people:

"A well planned curriculum in experiential learning can help students to improve the quality of care for older people by exchanging more positive experiences for past stereotypical attitudes" Group 2:NT3

In terms of teaching and learning, faculty teachers suggested the wider use of personal stories and reflective practice to enhance the teaching and learning process. Shared experiences will strengthen the connections between theory and practice in the clinical arena and help students to see other older adults in a more realistic light:

"I have as a family member an older lady who has suffered a stroke: I present her story in order to use reflective practice to illustrate symptomatology, diagnosis, treatment and nursing intervention with stroke to enhance students' experiential learning in this field." Group3:NT5

Diary writing was also seen to help students to reflect on the teaching and learning process and to express personal needs for learning about the care of older people:

"Reflective dairy writing will help students to express their needs regarding teaching and learning about the care of older people" Group1:NT1

Faculty teachers discussed the use role-play, simulation games and practice sessions in the laboratory and saw these as fruitful approaches. They reflected on the importance of using audiovisual materials such as CD and films on, for example, the ageing process, and on

ways to provide information for students to enhance teaching and learning and forge links between theory and practice. These strategies should help students to better understand the care of older people and foster greater knowledge:

“Viewing a film on older people with hearing and visual impairments, for example, can help students to recognize how they can provide nursing care for those people and utilize different services in the teaching and learning process with older people.” Group1:NT5

The teachers concluded that in terms of teaching and learning experiences, students must be assigned to larger numbers of older people and spend enough time with them, whether in acute care, home care, or in psychiatric\mental health settings. Moreover, in teaching and practice, teachers recommended using more community centres to encompass well in addition to ill older people and shifting the balance from a “task orientated” to a “relationship oriented” approach. Group participants also proposed different experiential learning methods in gerontological education, such as the use of stories, reflective diaries and audiovisual materials, to enhance the teaching and learning process. Particular work needed to be done in nursing homes. The groups agreed that Gerontological nursing education will face many challenges, one of these being to prepare nursing faculty members to act as role models for students. This is the focus of the next section.

5.5.3 Teacher’s role [mentors’ and preceptors’ role]

In the focus group discussions, the nurse educators reflected that the BSN curriculum in gerontologic nursing will be strengthened when the nursing faculty members recognize the importance of teaching gerontologic nursing in the academic nursing programme to improve older people’s health services:

“A nursing curriculum with enough clinical experience in gerontologic nursing taught by qualified instructors who can serve as role models can make a change in older people’s health services.” Group 3:NT2

Nurse educators recalled that to increase students’ nursing knowledge and improve their attitudes, appropriate gerontology teaching from qualified teachers, in the form of combined theory and practice, is important in encouraging nursing students to work with older people:

“Appropriate gerontology teaching in the clinical arena is important and

could greatly influence nursing students toward care of older people and to select working with them in future. Nursing schools need qualified teachers to teach nursing students both in theory and in the clinical arena to strength nursing programmes.” Group1:NT4

In light of this, nursing faculty staff agreed that few of the nursing faculty members teaching nursing students on the Saudi BSN programme in the three nursing schools under study were qualified gerontological nursing specialists. They reflected that the provision of gerontology as a separate course in the future would offer more specialist staff within the nursing colleges. Furthermore, these teachers will be able to work as role models in developing positive attitudes and focus their teaching efforts toward of the care of older patients, whether in theory or in clinical practice:

“Nursing students need role models who are highly qualified and skilful clinical instructors in gerontological nursing, but if schools provide a single course in gerontology, they will recruit more specialist staff who can help the students to learn in the correct way, and that that will strengthen the curriculum.” Group 1:NT1

Hence, nursing students need role models such as nursing educators and staff nurses in their educational and practice settings who are dedicated to the older population. Nursing educators in nursing colleges can play a major role in changing the attitudes of nursing students through the gerontology course programme, with a view to securing positive attitudes and intentions to work with older people:

“Nursing students need expert role models who prefer to work with older individuals as clinical instructors during clinical practice, which can influence nursing students’ attitudes toward older people” Group 3:NT3

Furthermore, the focus group discussions focused on educational strategies for improving nurses’ attitudes towards older people, and many participants highlighted similar issues concerning the influential role of nurse educators as being a particularly important matter for gerontological nursing education:

“We must be concerned about our behaviours - I mean our positive attitudes toward older people as professional teachers dealing with older persons during teaching in the clinical arena and in schools of nursing, which need gerontologic education programmes.” Group 2:NT1

The focus group participants emphasised the role of clinical instructors in the clinical area and the importance of them expressing positive attitudes and conveying interest in the care

of older people, as this would be transferred, directly or indirectly, to their nursing students:

"In the clinical arena, if clinical instructors do not respect older people, that will conveyed directly or indirectly to nursing students. For that reason, we must control and watch our behaviour and create positive attitudes toward older people" Group 1:NT4

Nursing teachers claimed that they had little gerontological content in their educational preparation because most of them had graduated from the existing nursing programme. Furthermore, some of them had no preparation for teaching theory and practice in gerontologic nursing, which would influence the quality of nursing graduates and their ability to meet the care needs of older adults in the future:

"The Baccalaureate nursing programme has a shortage of full-time faculty certified and specialized in geriatric nursing, which might affect the teaching of nursing curricula. Faculty members who are qualified in geriatrics can play a significant role in teaching the theory and practice of gerontologic nursing" Group 3:NT3

"The majority of the faculty in this school have not taken a gerontology course. The faculty educational level is limited in this area. As a result, the majority of the faculty have rarely worked with older people" Group 2:NT3

The focus group participants discussed several interrelated factors that combine to make gerontological nursing less attractive than other specialities. These include inadequate staffing, weak administrative support, lack of commitment, and inadequate educational preparation of faculty in gerontology, which tend to lead nurses students to believe that working with older people is not as exciting as working with other groups:

"We are short of staff: sometimes there are ten students to one preceptor, and it is difficult to concentrate on the care of older people because some of us are not specialized in this field and the administration does not support us by decreasing our workload and recruiting specialist gerontology teachers ""Group 1:NT5

The groups concluded that nursing education takes place in a complex setting involving social interactions and relationships among and between a variety of groups, including older people. When student nurses are in a learning environment, they interact with older people as well as nursing staff. Therefore, in clinical settings, staff, including faculty

members and nurses, must provide students with models of the nursing role. To achieve this, it is imperative that the nursing faculty and staff nurses are aware of their own attitudes toward older people and have positive perceptions of them, to act as role models for their students. Critically, since all nursing students will interact with older people, it is important to include gerontology nursing education in the nursing curriculum: this issue will be explored in the next section.

5.5.4 Curriculum

The focus group participants asserted that the influence of education, early professional experience and the impact of professional knowledge were central to changing student nurses' attitudes toward older people and that gerontology education had a significant influence on positive attitudes that could lead to the acquisition of adequate knowledge to provide quality care for older people:

"Nursing students should have the opportunity to interact with the theoretical content of ageing in clinical experience to change their attitudes, and schools of nursing must provide expertise to help ensure that the curriculum is well prepared to improve the quality of nursing graduates' work with older people" Group 1:NT5

The development of an enriched programme in gerontology nursing was considered an important and vital issue in the Saudi nursing curriculum, as emphasised in focus groups discussions:

"Our nursing school, through the courses offered, integrated curricula, programmes, workshops, lectures, research and practice in gerontology, can dispel myths and be informative to foster positive attitudes regarding gerontology nursing" Group 2:NT6

The teachers suggested that core components of the gerontological nursing curriculum should include theories of ageing, changes in normal ageing and common problems for older people. Nursing students need to consistently use knowledge of age changes, preventive health care and common problems of chronic illness such as falls, incontinence and confusion. However, teaching these complex issues calls for specialized faculty, as the focus group participants reflected:

"The increasing number of older people indicates a strong need for a core curriculum in gerontology in preparation to bridge the gap between theories and practice in the clinical arena, and a need for a well-prepared prepared faculty in gerontology to teach that core syllabus" Group3:NT1

The group discussions revealed an important aspect in the care of older people, namely the integration of the spirituality of ageing into the nursing curriculum within gerontological nursing. Consequently, faculty teachers mentioned the assessment of spiritual needs and emphasised that appropriate interventions should be taught as an integral part of the nursing process to help students to recognize spiritually distressing experiences, and to foster teaching and learning processes to help older people to work them through:

“Nurse educators can help nursing students to incorporate the spirituality of ageing into their nursing practice within the gerontology nursing aspect of care in the assessment of needs in the curriculum” Group1:NT6

The group participants asserted that within the curriculum, they could develop the knowledge and skills to enable students to support older people to achieve forgiveness, resolution and reconciliation in the clinical area:

“Knowledge of attitudes about ageing expressed in the various religious will help students to gain a broader understanding of the concepts of spirituality and ageing” Group1:NT3

Some faculty members proposed that within the nursing curriculum, students need to identify at least one spiritual need with older patients in each day of clinical practice when providing holistic nursing care to older people:

“In the nursing curriculum, student nurses communicate with older people that spiritual concerns are important, such as suffering, guilt, and dying: they should identify these needs daily in at least one clinical area ”
Group2:NT4

Other faculty members suggested that students should keep notes on spiritual experiences with older people in different clinical areas to increase their ability to incorporate spirituality into their nursing practice:

“Students have to keep special notes on spiritual experiences in relation to older people in each clinical area. This will help them to compare spiritual need in diverse settings” Group1:NT2

Faculty teachers held strong beliefs that since all nursing students will interact with older people, it is important to concentrate on teaching gerontological nursing in the curriculum,

whether as an integrated or a separate course. However, they believed there was a need for evidence to support one approach over another:

“The school of nursing must concentrate on gerontology teaching, either through the integration of gerontological content and clinical experience through all four years of the curriculum or separately in a specific course with specific clinical experience, but we need evidence to support the adoption of one curriculum design over another” Group3:NT2

The discussions with nursing teachers in focus groups revealed that there is a lack of agreement as to how the gerontological content and clinical experience should be organized within the baccalaureate nursing curriculum: whether they should be integrated or whether there should be a separate course in the nursing curriculum. Some nursing teachers suggested that gerontology nursing should be integrated throughout the entire nursing programme with increasing time and more gerontological nursing information in all areas of the programme, such as fundamental nursing, community health and psychiatric nursing (with the obvious exceptions of paediatric and gynaecology nursing). Other BSN teachers suggested that gerontological nursing should be offered as a separate course, with a focus on teaching gerontological theories linked to clinical practice with older adults. They reflected that:

“When gerontology content is integrated through a baccalaureate nursing programme like ours, I think nursing students’ lack of knowledge about the care of older individuals might benefit more if we added some lectures or separate courses in geriatric care” Group 3:NT6

The group participants were generally willing to include gerontological nursing in the curriculum, and were trying to find room and ways to add an integrated programme through all four years:

“Perhaps if we added more geriatric contents and clinical experience with older people as an integrated programme through all four years and concentrated more on lectures, especially in community health nursing related to older care, that would be more helpful in improving the knowledge and skills of nursing students in this field” Group 2:NT2

Despite this willingness, the participants found it difficult to reach agreement on the best way to include gerontological nursing in the curriculum and equal support was found for the arguments about including geriatric lectures as an integrated course (across the curriculum) and as a stand-alone course:

"The inclusion of gerontology contents remains a challenge to dedicated faculty, and we still do not know how the curriculum should be structured"
Group 2:NT1

Teachers reflected that the gerontological specific contents on the nursing curriculum are inconsistent and relatively meagre, with significant gaps, and that they need to be revised to bridge the gap between theory and practice. The programmes in nursing schools currently provide limited theoretical and clinical preparation for the care of older people. In the group discussions, nursing faculty members reflected that the nursing curriculum should include more extensive gerontological content and clinical experience with older people in different settings. However, no specific curricular guidelines have yet been provided by nursing professional organizations:

"The nursing curriculum at nursing schools may not significantly improve nursing students' knowledge and skills relating to the care of older adults. For that reason, we need to revise the curriculum and introduce extensive lectures on geriatrics to bridge the gaps between theory and practice in different settings." Group 3:NT6

Generally, therefore, nurse educators were critical of the current nursing curriculum, which had been designed to focus on theoretical content and clinical experiences in specialty areas such as medical-surgical, mental health, community health, maternity and child nursing, but not gerontological nursing. The focus throughout the students' training was on younger individuals, with little or no specific material to address the needs of older people:

"Our geriatric content and clinical experience with older adults is insufficient in theory and practice, and nursing schools need to examine and revise the curriculum to recognize the importance of the gerontologic specialty compared with other specialties such as medical surgical nursing, mental health, community health and maternity and child nursing." Group 2:NT5

Interestingly, the focus group discussions concluded that it was necessary to include material on the care of older people earlier in the programme, so that it could serve as a foundation on which to build nursing students' attitudes at the early stage of their training:

"The foundation of geriatric nursing must be introduced at an early stage in nursing schools as an integrated course (in the first year) to prepare nursing students at the beginning of the nursing programme in order to shape their attitudes to meet the needs of older people from the outset."
Group 1:NT3

"In light of the increasing need for nursing students to be competent in geriatric care, they need to know about the care of older people from the first year and to be exposed to older patients early on, to provide basic care and positive attitudes from the beginning of the nursing programme" Group 1:NT6

The group discussions shed light on the importance of evaluating and revising the nursing curriculum, as the baccalaureate nursing programme was last revised and updated in 1994. Further revision is needed to meet both the current needs of students and the future health needs of Saudi Arabia. Participants felt that experts and specialist nursing educators must evaluate and revise the nursing curriculum regularly to identify any deficiencies and initiate the required changes in academic nursing to reflect changes in society. Moreover, the groups agreed that a concerted effort must be made to include Gerontological nursing as a specialty in undergraduate programmes with an emphasis equal emphasis to that of other specialties:

"The educational programmes in nursing schools need to be well designed and need to revise the geriatric curriculum syllabus, send it to experts in geriatrics for review and operationalise the geriatric contents as they do with other specialties" Group 1:NT6

Gerontological professionals are continuing to develop educational programmes and to evaluate the effectiveness of these programmes. Focus group participants drew attention to the need to provide quality care for older people by establishing education programmes in gerontological nursing:

"We need to establish education programmes in gerontology nursing and review the course curriculum to determine which contents should remain integrated and which contents should stand alone, and input from gerontology professionals is needed to decide that." Group 3:NT5

In conclusion, any effort to improve gerontological nursing education must also focus on nursing educators themselves. They must examine their own knowledge and attitudes about older people and rise to the challenge that gerontological nursing offers. Gerontological nursing content is currently limited in the undergraduate nursing curricula and the teachers were critical of this. The nursing curriculum at nursing colleges in Saudi Arabia is still in its relative infancy in

terms of gerontological nursing and the current undergraduate programmes provide limited theoretical and clinical preparation for a career in this field. This limited preparation is thought to be reflected in the quality of care provided for older people.

5.6 Qualitative data: summary and conclusion

Gerontological education in nursing is currently a vitally important issue as the number of older people is increasing worldwide. The overall purpose of this study was to explore and, if necessary, to improve Saudi undergraduate nursing students' attitudes and knowledge about older people to encourage them to work with this group. To achieve this, the study also considered faculty members' thoughts about gerontological nursing education to identify implications for the gerontological curriculum in baccalaureate nursing schools. The data from the qualitative results have been enriched by the qualitative data from nursing students and nursing teachers, which has shed light on their views and provided the first triangulated study in Saudi Arabia to explore the perspectives of both nursing students and their teachers about gerontological education and clinical practice.

The qualitative data reveal a range of different issues from nursing students' perspectives, as expressed in response to the open-ended questions included in the survey, which give some potentially telling insights into their views on the care of older people as a future career option. These issues include: life experiences with older people prior to nursing, cultural, social and religious factors (including family and women's responsibilities) and learning experiences, which are divided into positive and negative clinical experiences and nursing home experiences, as well as issues of inadequate preparation and the presence or absence of role models. The nursing clinical experience category was further subdivided into several subcategories, namely positive and enriching experiences, negative and discouraging experiences and nursing home experiences. These themes and categories deserve consideration in their own right and should be focal concerns in the design of appropriate gerontological nursing educational programmes. In light of this, several nursing students suggested that schools of nursing should include gerontology courses in their curricula and that they must be provided with positive clinical experience to encourage interest in this increasingly important field of specialization to raise the quality of care that older people receive.

The qualitative findings from focus group discussions with nursing faculty members also raised several issues capturing their perspectives on gerontological education both in the clinical and in the academic arena. There were coded as: clinical experience, teaching and learning experience, teachers' roles and bridging the gap between theory and practice in the curriculum. The clinical experiences were further coded into two categories: nursing students' attitudes and nursing home experiences. Several teachers considered that nursing students' attitudes toward and knowledge about older people could be improved by providing a variety of courses on gerontological nursing. With regard to learning and teaching experiences, the teachers emphasised the importance of "relationships oriented" teaching methods, rather than the current "task oriented" approach, when dealing with older people and their care. Teachers also suggested the use of experiential learning, and different teaching methods such as role-play, stories, reflective diaries and audiovisual materials. Furthermore, the qualitative results suggest that gerontological nursing courses might enhance nursing students' views of gerontological nursing as a future career choice and strengthen the links between theory and practice. The qualitative data also indicated that students need more clinical skills and greater knowledge of ageing to give them increased competence and a greater sense of satisfaction in such work.

Nurses will continue to provide a large portion of the contact and health care services to older adults, and therefore nursing education programmes can play an important part in the acquisition of appropriate knowledge by student nurses and to help shape their attitudes towards older adults. This would result in more positive and rewarding experiences for both older adult clients and nurses themselves. However, in the future, gerontological nursing should involve the development of an integrated programme of policy, research and education activities within the nursing curricula, which should include health care assessments, knowledge of ageing, psychosocial perspectives, portfolio evidence and work in clinical settings. This in turn should result in the development of new skills among student nurses and facilitate more holistic approaches to the care of older people. Moreover, the role of the nurse is changing rapidly nowadays, as the major provision of health care moves into the community setting. It is therefore essential to expose nursing students both to ill and well older people in the community to improve communication and relationships with older people. Furthermore, specialized faculty members are needed, who have experience and training in Gerontological nursing and are able to forge links between

theory and practice in gerontology education. Faculty members must take the initiative and inform themselves by attending short courses and training programmes in gerontological nursing. The present need for gerontology nurses dictates that more continuing education programmes should also be developed for the wider nursing population. There are many positive and innovative approaches to educating and training individuals to work with older people and improving their awareness of older people's specific needs, biologically, psychologically, socially, spirituality and culturally. To meet and satisfy these needs, it is vital to include gerontological nursing courses in the nursing curriculum. These gerontology courses, whether separate or integrated, are essential to bridge the gaps between theory and practice to improve students' knowledge and change their attitudes toward older people, thus encouraging them to select this type of work as a potential career option. Clearly, it is necessary to include Gerontological nursing in all undergraduate programmes, with an equal emphasis to that of the other specialties. Having explored the students' and teacher's views regarding the care of older people as a career choice in this chapter, several key themes have emerged that highlight important issues that arose regarding the current status of the gerontology curriculum in the undergraduate nursing programme in Saudi Arabia. The following chapter, the discussion, explains the major findings that have been developed and evaluated in this study.

Chapter 6

Discussion

6.1 Introduction

The aim of this study was to explore the attitudes, knowledge, willingness and intentions with regard to work preferences towards the care of older people among nursing students in Saudi Arabia, and to explore the effects of clinical nursing practice on nursing students' knowledge, attitudes, willingness and intentions/work preferences towards the care of older people in the first year and the final (pre registration) year in three major university hospitals. The study also determined nursing faculty members' attitudes towards older people, shared faculty members' thoughts about gerontological nursing education and drew implications for the gerontology curriculum in baccalaureate nursing schools. The theory of planned behaviour (Fishbein and Ajzen, 1975) was used in this study as a conceptual framework because it offers a constructive and plausible way to identify intentions related to attitude, willingness and clinical experiences among nursing students toward working with older people. This theory views a person's intention as the immediate precursor of action and argues that a person's intention is a function of three basic factors attitudes, subjective norms and perceived behavioural control. Furthermore, the theory of planned behaviour (Fishbein and Ajzen, 1975) also considers how external variables such as social norms (cultural, religious, family and social aspects), may influence the attitudes of nursing students toward working with older people. Whilst the study used a primarily quantitative, survey based approach it is enriched by data from the open-end questions included in the survey, which provide some potentially telling insights into nursing students' views.

The total population comprises 769 nursing students on identical baccalaureate nursing programs in three universities and the only ones that are government funded. The western University in Jeddah has a total population of 351 nursing students, while the central University in Riyadh has a total population of 205 nursing students and the eastern University's total population is 213 nursing students. The gerontology curricula in all three universities are identical, as they are integrated through the nursing program. Therefore,

the results may only reflect and be generalized to Saudi female Bachelor of Nursing students concerning the care of older patients in Saudi Arabia.

Based on the quantitative and qualitative findings that emerged from the current study, the following conclusions are presented.

- 1 - There is generally a favourable and positive attitude among Saudi nursing students toward older adults. All Saudi nursing students at different levels of education were found to hold positive attitudes toward older adults.
- 2- Saudi nursing students have, in general, relatively poor knowledge of the physical and behavioural aspects of ageing.
- 3- The results indicate that the educational backgrounds of the students vary in terms of gerontological education. Some of them are not receiving enough gerontology training and there is a lack of clinical training with older people.
- 4 - Relationships were found between attitudes toward older people, willingness to take care of older people and intentions toward the care of older people at all levels of education, and all correlations were positive.
- 5 - The data indicated that, for most of the respondents, the age group with which they would most like to work was infants, with preschool children representing the second choice, followed by young adults. School age children, middle-aged adults and adolescents were the fourth, fifth and sixth preferences. Older adults and older people were the least preferred group among students.
- 6 - The data reveal that nursing students who indicated a preference to work with older people and older adults as a first choice held positive attitudes, with the highest scores for willingness and intent to work with older people as their first career choice.
- 7 - The data reveal the potential for clinical training experience with older adults to significantly improve (attitudes, willingness and intention).
- 9 - The students' perspectives on the care of older people focused on three major themes: these were coded as life experience with older people prior to the nursing context, cultural, social and religious factors and learning experience.
- 10- Four themes emerged from teachers' focus group discussions, namely clinical

experiences, teaching and learning experiences, teachers' roles and bridging the gaps between theory and practice in the curriculum.

6.2 Reflections on the usefulness of the Theory of Planned Behaviour

Fishbein and Ajzen (1975) developed a theoretical model relating beliefs, attitudes, intentions and behaviour, and this theoretical model was selected to provide direction and structure for this study of the care of older people. Building on this conceptual framework, the study set out to articulate a range of influential factors, such as subjective norms and perceived control, to explore work preferences toward care for older people among nursing students. Detailed examination of such factors has generally been limited, with little previous nursing research attempting to predict or explain the behaviour of human beings toward older people themselves and working with older people as career options. Especially in non-western cultures, this issue has rarely been investigated. This current study is an attempt to review, evaluate and extend the body of knowledge about Saudi nursing students' attitudes toward older people from a career perspective, in terms of whether or not they wish to work with older people as a positive career move. Significantly, this knowledge will also give an indication of whether or not nursing students' education programmes provide them with sufficient information to meet the needs of older people. Furthermore, this study explores the understandings and meanings that Saudi nursing students' attach to the care of older people and the factors that influence their decisions as to whether or not to work with older people in their future careers.

Moreover, this study provides an enhanced understanding of the relationship between beliefs, attitudes and intentions to perform a behaviour, whilst also providing a critique of this conceptual framework and its usefulness in understanding such relationships and their influence on the care of older people. The theory of planned behaviour proposes that behavioural intentions, the proximal determinants of behaviour, are predicated by the outcomes of several different factors. These factors include the individual's attitudes towards the target behaviour, subjective norms and perceived behavioural control. Attitudes are understood as the individual's beliefs about the target behaviour, along with their evaluations of its outcomes. In this current research, nursing students' attitudes towards older people were found to be broadly positive, which should help to predict positive intentions toward working with older people.

However these positive attitudes toward older people were found in this study to be related to a number of complex factors such as older people's level of social and interpersonal functioning. Indeed, in this current study, emotional closeness and contact with older people were found to be influential in developing positive attitudes toward them. The experience of having cared for older individuals during childhood was significantly linked to positive attitudes toward older people in this study. This is something that is outside the control of students' nurse education, and highlights the importance of pre-existing influences. Similarly, Hatton (1977) found a correlation between positive attitude scores and positive social interaction. This positive attitude toward older people and its influence on other factors will be explored in more detail in the next section of this discussion chapter.

Furthermore, this study found that student nurses with the most positive attitudes toward older people were more likely to prefer work with older people as compared to those with less positive attitudes. Therefore, nursing students who were willing to take care for older people in their future work were more likely to follow this career path and select gerontological nursing as their highest work preference. Thus, the connection between attitudes and intentions postulated by Fishbein and Ajzen (1975) was in part confirmed in this current study. Significantly, the intention to work with older people had a positive relationship with the actual selection of this role as a work preference. The consistency and size of the positive relationships between attitude and work preferences toward older people among nursing students in this study gives some support for the usefulness of Fishbein and Ajzen's model relating attitudes and behavioural intentions.

However, the study also found that even those students who did not select older people as their most preferred age group were still willing to work with older people. Therefore, willingness to work with older people did not depend on choosing older people as the most preferred age group. However, in this current study, the limiting of choice of work preferences only to the age of patients in the questionnaire, might have restricted some student nurses' expressions to certain characteristics and did not allow them to express other aspects which might have a bearing on preferences. Moreover it should be kept in mind that attitudes are only a relatively weak predictor of behaviour, with some studies suggesting that they account for only 10% of variance with the other 90% being attributable to personal factors, individual perceptions or expected outcomes.

Other research related to the attitudes and behaviour of nurses toward older people supports this study's findings. A study by Elliot and Haybertson (1982) found a systematic relationship between the expressed attitudes of nurses and their behaviour toward older people. In line with this, McKinlay and Cowan (2003) showed how they could apply the Theory of Planned Behaviour to explore the attitudes towards working with older patients and the behaviours of 172 student nurses who had displayed positive intentions towards working with older patients; an analysis of the beliefs underlying student nurses' views showed that they differentiated between those participants who had a relatively positive approach to their work with older patients and those with a less positive approach. Recently, Prestia *et al.* (2008) used the Theory of Planned Behaviour (TPB) to measure nursing students' attitudes toward home health nursing. The study reported that home health nursing is valuable and recommends that more effort should be addressed to the home care nursing shortage.

However the theory of planned behavior does not suggest a direct relationship between attitudes and behaviour but rather that the relationship is mediated by subjective norms and perceived behavioural control. It is here that the complexity of the situation with regard to the situation of nursing students exposes some of the limitations of this theoretical model. In this current study, differences in students' response in terms of work preferences with older people may have occurred because of the exposure of Saudi nursing students to strong subjective norms at two levels, societal and professional. For example, it seems likely that students' very positive attitudes towards older people are the product of strong subjective norms at a societal level. However despite this most students still see this as their least preferred career option. This may well be because, during their training, they are also exposed to strong subjective norms at the professional level, for example during their ward placements, which give them a view of gerontological nursing as an uninteresting and repetitive job. Also, there is the powerful potential influence of perceived behavioural control. This is likely to operate on at least two levels. First, as students feel inadequately prepared for their placements, they are likely to feel that they have little control and to be unsure about their role and purpose. This may exert a negative influence on their perceptions as they may well feel that they have little to contribute to the work of the ward. Second, if they believe that, even as qualified nurses, they will not be able to change either the quality of care or the status of gerontological nursing, this is very likely to have a

further negative impact on their perceived future career choice. Compounding matters their lack of preparation is not limited to theory: they are also insufficiently prepared for the clinical arena. It was those students who were anticipating their first placement who perceived the lack of preparation as having the greatest impact. This again highlights the very limited behavioural control they will feel, which is likely to further discourage them from choosing gerontological nursing as a career choice.

In this study, I adapted the conceptual framework from Fishbein and Ajzen's theory of planned behavior (1975) to explore a different relationship between attitude, intention and actual behaviour, which has been widely argued and debated in previous research. Whilst it has proved of some use it is limited in its ability to fully account for the range of complex factors that shape behavior. Others have reached similar conclusions. For example Robby (1979) reported that consistency between attitude and behaviour has been difficult to prove and validate. In general, several studies challenge the assumption that the predictors in the theory of planned behaviour are adequate to explain the link between intentions and behaviour. Furthermore, I found from my study that attitude, or 'general predisposition' according to Fishbein and Ajzen, does not predispose an individual toward any specific behaviour action. Similarly, I found that no link has yet been clearly established between attitude, belief and behaviour especially with regard to the care of older people. Indeed, many studies consider there to be a vague and ambiguous link between attitude and behaviour and this study would suggest that there is no clear relationship.

However, what this study does highlight is that it is important to make the distinction between attitudes towards old people themselves and attitudes towards nursing work with older people. It appears from this study that there is a positive attitude toward older people, as measured using the Kogan scale, but that this does not necessarily translate into an increase in the desire to work with this group. However, whilst the reasons for this are not clear it might be due to the status of gerontological nursing in work environments. Therefore it might be reasonable to suggest that it may be the structure of nursing work rather than the client group itself that leads to nurses' reluctance to work with this group, as this study showed. This takes into consideration the gap between positive attitude and action in working with the elderly in future.

One conclusion from this study is that the theory of planned behaviour does not offer a satisfactory explanation of student nurses' behavioural intentions towards working with older patients as a future career. Rather a complex array of factors is at play in which there is a potential tension between the influences of subjective norms that operate at a societal and a professional level and the limited perceived behavioural control that students experience.

In the following sections of the discussion, I will explore subjective norms and perceived behaviour control in greater detail. According to this study's results, it seems that these are key influences on the care of older people from nursing students' and their teachers' perspectives. However, since the student nurse of today is the health care provider of tomorrow, the attitudes of these baccalaureate students toward older patients remains a vital concern. For that reason, the study of attitudes held by baccalaureate nursing students toward older people continues to be a major focus of concern for nursing research in gerontology worldwide. The next section therefore turns attention to the attitudes toward older people among Saudi nursing students.

6.3 Attitudes toward older people

The results of this study indicate that nursing students on the Saudi BSN program hold positive attitudes toward older adults. Furthermore, this result indicated a favourable and positive attitude among Saudi nursing students towards older adults, similar to their teachers in nursing schools. Significantly, this study revealed that all correlations were positive and statistically significant relationships were found between attitudes toward older people, willingness to take care of older people and intentions toward the care of older people.

Moreover, Fishbein and Ajzen (1975) point out that human behaviour is reasoned behaviour and attitudes are determined by beliefs about an object associated with negative or positive attributes. In the same vein, McKinlay and Cowan (2003) used the theory of planned behaviour to examine student nurses' attitudes towards working with older patients. The study results support this research, revealing that student nurses' positive intentions were related to their positive attitudes. However, due to the crucial role of attitudes in influencing nursing professionals to work with older people, several previous studies have explored nurses' attitudes towards older people, and the findings of this study support those that have found favourable attitudes among nursing students toward older people (Hweidi and Al Hassan, 2005; Zakari 2005; McKinlay and Cowan, 2003; Lookinland *et al*, 2002; Nolan *et al*, 2002; Wei 1995). It also supports the findings of Ausherman (1991), who states that junior high school health teachers' attitudes toward older people were slightly positive.

In a more practical vein, there is clear evidence from this study that there was a high mean positive attitude when nursing students entered the BSN program after completing high school, at which point most of them were in their late teens. Similarly, McCracken *et al* (1995) report that first year nursing student hold more positive attitudes than second year nursing students. However, the present study revealed that positive attitude was slightly decreased in the second and third years among nursing students before reaching a maximum in the fourth year and fifth years. These findings suggest that students already hold positive attitudes towards older people on entering the BSN program and that all nursing students at different levels of education hold positive attitudes toward older adults.

Similarly, Zakari (2005) showed that Saudi nursing students held positive attitudes toward older people.

Similarly, in this study, the quantitative data alone were not sufficient to explore and understand the meaning of positive attitudes among nursing student toward older people. The qualitative data explained that these positive attitudes are strongly influenced by Saudi Arabia's cultural, social and religious backgrounds, as well as family and women's responsibility, which were reflected as positive and significant influences on life experiences as strong foundations that students bring to bear in developing positive perceptions toward older people. Murray (1979) has this to say about societal attitudes towards the aged:

"How a given society chooses to deal with ageing and the aged depends on a variety of psychological, sociological, and economic factors. Knowledge of these factors, unfortunately, does not always offer clear explanations for specific societal attitudes toward ageing". (p.141)

Consequently, cultural and religious concepts in the care of older people among Saudi nursing students were identified in this study as significant positive factors in influencing their positive attitudes towards older people and their desire to respect and serve them. Furthermore, in this study, Saudi nurses usually live in the same house as their grandparents and provide care for them, so their positive attitudes toward older people are not unexpected. These positive attitudes are likely to reflect the Saudi culture. Similarly, Wei (1995) explains that students often view older people as similar to their grandparents, a view which fosters positive attitudes.

However, in Saudi culture, older people are regarded with great admiration and respect. These attributes are often easy for Saudi nursing students to comprehend and older people are thus accepted in Saudi culture from a moral perspective. Moreover, Callaghan *et al* (1996) claim that attitudes are influenced by many factors primarily related to socialization issues such as students' religious and cultural beliefs, as well as their personal values. Culture can be defined as "...the ideations, symbols, behaviours, values, and beliefs that are shared by a human group" (Banks, 1997, p.8). Furthermore, "cultural competence requires knowledge of values, beliefs and practices of various cultures, along with attitudes of awareness, openness and sensitivity" (Wilkinson, 1996, p.71). In this study the majority of nursing students viewed care for older people as driven and influenced by their cultural

perspectives. For that reason, Saudi nursing students regard the care of older people as a role of respect from their cultural and social perspectives. In the same vein, Andrews (1991) points out that people's attitudes are greatly influenced by cultural values, norms and the social structure of the community.

Consequently, most of the participants in this study recounted that their Islamic religious beliefs shape part of their perspectives on caring for older people, encouraging them to accept the duty to care for them as payment for debt and for the sake of Allah. Similarly, Hweidi and Al-Obeisat, (2006) state that Islam, like many other religions, urges its believers to value and respect older people, and that this positively influences students' attitudes toward older people. Therefore, from a religious perspective, it is maintained that caring for older people is a part of the reward from Allah. These data reflect that older care is encouraged by the students' religion and the fact that in Saudi culture calls for respect and support for older people:

*"The noble prophet said; 'Allah has ordered goodness in doing everything
'Any young person who is kind to older people because of their age, Allah
will send him someone who will be kind to him when he becomes old'"*

In keeping with this, the present study found that the majority of respondents reported that their religion encouraged them to provide care for older people and emphasised that their religion and the strength of their religious beliefs were at the core of their attitudes towards working with older people, willingness to take care of older people and intentions to work with them. The Islamic faith is certainly the major aspect responsible for shaping the Saudi society and culture, and thus plays a significant role in nursing students' views toward the care of older people in this study. Alongside this, the findings of this study support those that have found a correlation between religious views and older people's care (Hweidi and Al-Obeisat, 2006; Hweidi and AlHassan, 2005; Zakari, 2005; Al-Shahri, 2002; Berenbaum, 2000).

It was found that family and the responsibilities of women play a major role in female Saudi nursing students' perceptions of the care of older people: they were raised and have lived in this culture and learnt in its educational system, which has influenced and shaped their desire to provide care for older people. There is convincing evidence from this study that Saudi female nursing students accepted care for older people as part of their role as women and their family responsibility, as is clearly evident in Saudi society. Similarly,

Tobin and Kulys (1980) argue that older people depend primarily on women for their care: wives are helped by daughters and daughters-in-law. In the light of this, Al-Khateeb (1987) points out that in Saudi culture women are assumed to be mothers and housewives, and men are assumed to be the breadwinners. However, most of the students in this study point out that their roles in the family involved the care of grandparents. This could be related to their gender as female nurses. This supports the assertion that females fulfil the responsibility of caregivers because they are socialized to enact caring and nurturing roles (Soderhamn *et al*, 2001; Slevin, 1991).

Therefore, the historical socio-economic and political conditions of Saudi Arabia are important to understanding women's role in Saudi society. In Arabic culture, women traditionally remained at home to raise children and care for older people, while men went to college and university and sometimes moved long distances in search of jobs to improve their family status. Alrabea (1994) points out that many Saudi women leave their jobs because of family circumstances and control by their male counterparts. In the same vein, Al-Khateeb (1987) shows that in Saudi Arabia female participation in waged employment is very low with only 5.1% of women of working age participating in the labour force. In some instances, Saudi women were left with the primary responsibility for child-rearing and caring for older adults, which might have prevented them from pursuing education and employment opportunities. In this light, White (1999) claims that many women will not have the autonomy to pursue jobs out of their current geographical area, or to take on roles that are full time or have internal rotation working hours. However, the younger generation in Saudi Arabia, including female nursing students, still uphold the traditional values of the family and women's responsibility to respect old people and encourage empathy and filial responsibility.

Alongside this, these baccalaureate nursing students came to be familiar and appreciate care for older people as foundation care through links made with their early life experiences and developed relationships with older people outside school, primarily through living with older people. In the light of this, Murray and Chambers (1991) revealed that students' attitudes toward older people are influenced by students' previous life experiences, their initial expectations of nursing the client group and the nature of their experiences.

Consequently, in particular, participants suggested that there was considerable potential for favourable influences from experiences prior to nursing - that is, life experiences with older people – to both challenge and support the positive attitudes of Saudi nursing students and their acceptance of the care of older people. This finding supports a study by Leonard and Crawford (1989), who concluded that attitudes are initially formed at social and personal levels. Similarly, Makin-Bounds (1990) suggests that beliefs about older individuals are moulded by social experience rather than professional experience.

Socially, the extended family system prevails in Saudi Arabia, where the vast majority of older people are living in households of four or more people, and that might affect the students' attitudes and acceptance of older people. In keeping with this view, Hweidi and Al-Obeisat (2006) report that, in Jordan, where the extended family system predominates, nursing students hold positive attitudes toward older people. The family is still the basic source of support and the central element of the care system for older people in Saudi Arabia. In Saudi culture, older people live in the homes of their children and are cared for until their deaths; for that reason, the family concept is an important influence on the attitudes of nursing students and how they deal with older people.

For that reason, in this study, nursing students' past experiences in the family context are very important in determining their attitudes toward older people. Furthermore, Saudi nursing students grow up in a family framework, caring for older individuals as one of their primary roles. It was regarded as a family responsibility to provide care for parents in cases of need and to help make their lives as comfortable as possible. In Saudi families, when parents reach old age, they are treated mercifully, with kindness and selflessness, and the attitudes of nursing students are usually derived from family and personal experience. Similarly, in China, close family ties still predominate and older people live in multigenerational extended families (Sahar *et al* 2003; Zhang and Yu, 1998; Reinhardt and Quinn 1979).

In conclusion, these life experiences of living with older people outside the school of nursing context clearly influential is shaping students' positive attitudes toward older people. Nursing students were being acculturated regarding ways of being with older people from a very early age. Cultural foundations in Saudi Arabia place a premium on caring personally for one's family, and nursing students were connected in this cultural and

family framework. From that perspective, they had positive attitudes in terms of getting to know older people. However, this is largely based on cultural, religious and family concepts and has been the case for many decades, and nursing students raised in that culture respect older people as their family norms. From this basis, they have positive attitudes toward older people. The next section will discuss the intentions of Saudi nursing students toward working with older people.

6.4 Intentions toward working with older people.

The general objective of this study was to explore the intentions of Saudi nursing students toward working with older people as baseline data for Saudi nursing students' perspectives using the scale developed by Nolan *et al* (2002). However, this study found that positive attitudes toward older people accompany favourable intentions toward working with them. Similarly, the theory of planned behaviour states that a combination of attitudes toward behaviours, subjective norms and perceived behavioural control lead to the formation of behavioural intentions. Intentions have often been viewed as the "cognitive component of attitude," and it has usually been assumed that this cognitive component is related to the attitude's affective component. This conceptualisation has led to the assumption of a strong relationship between attitudes and intentions (Fishbein and Ajzen, 1975).

This study reports a significant correlation between attitudes and intent to work with older people, which indicates that there is a relationship between positive attitudes toward older people and intent to work with them. Similarly, McKinlay and Cowan (2003) reported that students' intentions toward working with older people were mainly predicted by their attitudes.

Alongside this, Fishbein and Ajzen (1975) proposed that:

"A person's intention to perform a given behavior is a function of two basic determinants, one attitudinal and other normative. The attitudinal component refers to the person's attitude toward performing the behavior in question; the normative component is related to the person's beliefs that relevant referents think he should or should not perform the behavior and his motivation to comply with the referents. Thus the information of a given intention depends on the prior information of a particular attitude." (p.332)

However, it is still not clear whether intentions about working with older people precede positive attitudes or whether positive attitudes precede intentions about working with them. In this light, Fagerberg *et al* (1997) differentiated attitudes toward older people from attitudes towards working with older people and reported that student nurses do not necessarily have negative attitudes toward older people themselves, but that they do have negative attitudes towards working with older people. Consequently, this study found similar agreement and a similar tone in the findings between attitudes toward older people and intentions towards working with older people. Several studies support this finding and have found that intentions towards work with older people were related to attitudes toward them (McKinlay & Cowan, 2003; Mehta *et al*, 2000; Wei, 1995; Liu & Hsu, 1994).

Accordingly, as a researcher and faculty member in a nursing school, I feel that it was crucial to shed light on this issue to give this study more depth, meaning and richness of data and to ascertain the intentions of Saudi nursing students toward working with older people. This information is considered important to the development plan to improve professional standards and practices in gerontology nursing in the kingdom. However, this study revealed a generally favourable intention toward working with older people, as illustrated below under the three important headings.

A) Work with older people in general

The results of this study indicate that nursing students on the Saudi BSN program hold favourable intentions towards work with older people in general. These positive and enriching experiences with older people had helped some of the respondents, who saw working with them as challenging and stimulating opportunity. In this light, nursing students who had already had a positive experience in general of working with older people consider that it is the older you are the easier to have a good rapport with older patients. This suggests that most of the time, female nursing students' contact with older people, sharing, talking, listening and providing healthy advice for them, represented a significant challenge for nursing students and helped some of them to see older people from different viewpoints and learn from their life experiences. These life experiences in Saudi society with older people outside the school context provided useful direction and better understanding of older people, helping nursing students to shape their intentions and to learn how to communicate and build a good rapport with older people. Student nurses responded positively to those older people who could communicate easily, especially when they found

similarities between their grandparents and other older people in the clinical area. Similarly, Williams *et al* (1993) found that effective communication strengthens the bond between grandparents and grandchildren and can influence the grandchildren's interaction with all older people.

Consequently, these opportunities to develop a good rapport with older patients had a significant impact on these Saudi nursing students' intentions towards work with older people. However, there was still a significant number who were yet come to a decision about whether older people are interesting to nurse. This suggests that nursing students are still ambivalent toward older people, seeing some experiences as positive and enriching and others as negative and discouraging. Similarly, several other studies have found that the number of nurses interested in working with older people has decreased (Herdman, 2002; Soderhamn *et al*, 2001; Happell, 1999).

Alongside this, working with older people in general serves as a focal point in nursing students' concept of care for older people, especially in the clinical area, and has a great impact on their career choices and preferences towards working with older people. In this light, Nolan *et al* (2002) suggested that there is much that needs to be done if work with older people is to grow to be an attractive career choice for nurses and other health care professionals. However, the qualitative data showed a need for greater effort in the preparation of nursing students, with the provision of integrated skills and knowledge in the care of older people. This will be discussed in the next subsection.

B) Personal disposition towards work with older people

A significant number of students remained ambivalent and had not decided whether they would consider working with older people when they qualified or whether this type of work would appeal to them at all and they if looked forward to their first placement with older people. Many respondents were unsure in answering statements about anxiety relating to their first placement with older people and felt anxious about working with them. Similarly, the findings of this study support those that have found that anxiety levels may be sharpened prior to placement with older people (Fielding, 1986, Mahat, 1992). However, this study has also shown that students are lacking the knowledge and skills required for working with older people, due to the absence of a gerontology course in the nursing curriculum: this factor might explain, or at least contribute to, their uncertainty and

hesitance with regard to working with them when they become qualified nurses. Similarly, Kaempfer *et al* (2002) point out that knowledge about older people was very low and insufficient because the students had not taken any courses related to the care of older people.

In this light, inadequate preparation of nursing students in terms of knowledge and skills can lead to indecisiveness about working with them in terms of career choices and preferences, as this study has shown. This is a very relevant issue and might affect the quality of care that they can provide in future and their career pathways in nursing in Saudi Arabia. Some nursing students see work with older people as a constraint and a barrier to an otherwise bright future. Similarly, Huber *et al* (1992) claim that a lack of knowledge about ageing can lead to a decrease in the quality of care for older people and an increase in anxiety and tension for nurses. This might affect nursing students' desire to work with older people in future. For that reason, nursing students and their teachers suggested that schools of nursing should include gerontology courses in their curricula to convince those that are undecided about the appeal of working with older people. Similarly, Nolan *et al* (2002) suggested that it is essential to persuade undecided students to work with older people and reinforce training in those students who want to work with older people when they are qualified.

The present study suggests that introducing students to a variety of clinical settings with ill and well older people can have a positive effect in enriching their experiences with this group, which can affect their subsequent career choices and convince unconfident students to work with older people when they are graduated. In this light, when nursing students are given an opportunity to work directly with older people, they often become more positive in their views toward working with older people (Sheffler, 1995; Brower, 1985). Similarly, Brown *et al* (2008 a, b) described the importance of the role of clinical placement experience in structuring student nurses' intentions of gerontological nursing. This will be addressed in the next subsection.

C) The consequences of working with older people:

The final set of intentions were concerned with the possible future consequences of working with older people, such as job status, job satisfaction and professional career moves. More than half of the Saudi nursing students did not consider that work with older people is a 'dead-end' job, offers little satisfaction, is not a good career move and is

associated with low status. Therefore, Saudi Arabia has not yet effectively expanded its nursing workforce to meet the health care demands of the Saudi population, especially with regard to older people. As a result, a large number of nursing students in this study disagreed with the statement that it is difficult to get a job elsewhere once you have worked with older people.

On the other hand, as might be anticipated, there were still some participants who were unsure about whether they would consider working with older people as a future career. Some respondents felt that caring for older people involved only basic cleaning and feeding and would lead to low self-esteem and a sense of being in a low-status, dead-end job. Similarly, Happell and Brooker (2001) explain that students do not prefer to work with older people because they see the work as uninteresting, unpleasant and frustrating. Gray and Smith (2000) found that students were suffering in clinical placement due to their assignment as auxiliary nurses rather than qualified nurses, and that might contribute to the fact that some of them regarded care for older people as a low status and dead end job.

The findings of this study support those that have found that affect of clinical placement on nurses' attitudes and willingness to care for older people (Brown *et al*, 2008 a ,b; Tovin *et al*, 2002; Hoffman, 2000; Sheffler, 1998, 1995; Tennies-Moseley, 1995; Roberts-Rudd, 1984). Indeed, despite these findings, there is an urgent need for specialized treatment centres for older people, including gerontology clinics, for example, emphasizing the importance of establishing professional nursing homes and residential homes, as found in western countries, to reduce costs and inappropriate institutionalization. In the same vein, Day *et al* (1995) found that clinical placements play a vital role in influencing professional development and attitudes among nursing students.

In conclusion, this study has found favourable intentions towards working with older people among Saudi nursing students in general, but the lack of knowledge and proper clinical experience in how to provide proper nursing care, due to the absence of gerontology courses at nursing schools, influence and instigate the choices made by a large number of students not to work in this area, despite their favourable attitudes towards working with older people in principle. However, to meet the Saudi society's emerging need for gerontology education, nursing schools should motivate students to select

working with older people as a future career by designing a well-planned curriculum in gerontological nursing. In particular, graduates of the future will care for older people in different health care institutions and students will be assigned large numbers of older patients, whether in acute care, home care or community settings in Saudi Arabia or when they move to other countries. The next section will compare Saudi and British nursing students' intentions towards working with older people.

6.5 Comparing Saudi and British nursing students' intentions towards working with older people

A comparison was made between British and Saudi nursing students to explore similarities and differences in intentions towards working with older people. Significantly, this study, for the first time, shed light on potential similarities and differences in intentions towards working with older people between student nurses in two geographically dissimilar locations in the East and West. The literature relating to the effect that cultural norms may have on influencing career choices is somewhat limited and contradictory (Gerrish *et al*, 1996). The results of this comparison revealed similarities in responses to most of the statements about working with older people in general between Saudi and British nursing students.

I made this comparison for two reasons: firstly, nursing students today will become staff nurses in the future, and exploring these issues will have an impact on the care of older people in both countries. Similar, Al-Shahri (2002) recommends that nursing programmes must increase awareness and understanding of culturally sensitive attitudes and practice. Nowadays, many Saudi nurses receive state sponsorship for their education in western countries such as the United Kingdom and the United States to increase their professional opportunities in nursing. In the light of this, Halligan (2006) reported increasing culture diversity in many health-care settings and considered exploration of this issue to be imperative and highly significant in nursing care.

The second reason is that, in light of global workforce movement and the shortage of nurses in Saudi Arabia, it is likely that some of these British students will work in Saudi Arabia in the future, so exploring their intentions toward working with older people is a crucial issue for nursing organizations worldwide. In 1991, Jackson and Gary conducted a

health workforce study the findings of which indicated that approximately 25,000 nurses were recruited in the kingdom of Saudi Arabia, of whom only 8.5% were Saudi nationals, while 91.5% were expatriates. The majority of nurses were not Saudi, as there were inadequate numbers of Saudi nurses to meet the demand of the kingdom (Aboul-Enein, 2002). Nurses are working with patients from different ethnic background both in their own countries and when they move to other countries and need to increase their knowledge of culture aspects of health (Parfitt, 1998). Watson *et al* (2003) also emphasised the importance of cross-cultural considerations in nursing research and the need to measure differences and similarities in intentions of care.

Accordingly, the present study found that British and Saudi students are similar in that they expressed positive views on most items relating to intentions to work with older people. The present study used a sample of student nurses (n=566) from three different nursing schools, while the British study (Nolan *et al*, 2002) used a postal survey with a large sample of students (n=718). The Saudi sample was all female and younger (mean age 21), while in the UK sample, 80% of them were under 30, 83% female and 17% male. On the other hand, while relevant British data were not collected in this study, it is probable that student nurses from both countries had considerably different gerontological education, training levels and previous backgrounds in working with older people.

Nolan *et al* (2002) reported in the UK that large numbers of students had worked with older people previously and many for several (often 10+) years. In contrast, in this study the results showed that large numbers of Saudi respondents had not previously worked with older people. In this light, it appears that clinical past experiences with older people can play a major role in acceptance or non-acceptance of working with older people as a career option among nursing students.

Consequently, specific geographical and historical nursing organizational factors relevant to the status of gerontological nursing in Saudi Arabia and the United Kingdom may have elaborated their endorsement of specific items on the intentions of working with older people scale. The results of this comparison revealed similarities in responses to most of the statements about working with older people in general between Saudi nursing students and British nursing students.

However, in Eastern cultures such as Saudi Arabia, people, including older people, are very talkative and it is easy to communicate with them: for that reason, many Saudi students agreed that it is the older you are the easier to have good rapport with older people, while British students disagreed with this statement. Williams *et al* (1993) reported that accurate communication between nurses and older clients will reflect in the quality of nursing care and argued that students should move beyond stereotypical attitudes to empathetic and effective relationships with older people. Similarly, Davies *et al* (1997) pointed out that it is important in nursing education to improve the quality of nursing care by establishing relationships with older people in different health care settings.

However, in Saudi Arabia, as explained previously, the curriculum of the nursing schools from which data were collected did not focus on gerontology: this might lead nursing students to feel that they are not sufficiently competent and skilled to consider working in this field, which might explain their uncertainty. In the same vein, Nolan *et al* (2002) report that student nurses, qualified practitioners, the general public and university students all show limited knowledge about older people in the UK and suggested the importance of widespread gerontology education to meet the needs of older people. Similarly, it is also important to mention that both studies found that nursing students did not prefer to work with older people and preferred instead to work with children. However, this result is not necessarily because of negative prospects from older people themselves: it might be due to lack of knowledge and experience with older people's care, especially with so much diverse illness; it may make some of them consider another specialty, such as paediatrics. Kuhn (1990) and Nolan *et al* (2002) found that area more attractive for nursing students than working with older people, and many students prefer to work in the child branch rather than in the geriatric specialty.

Significantly, the majority of Saudi students agreed that working with older people has a high status, while large numbers of British students were undecided on this issue. In the UK, there are different areas for the institutional care of older people, such as nursing homes and residential homes, therefore, many of the British nursing students had previously worked with older people and took this statement to refer to the status of caring for older people from this perspective, while most of the Saudi nursing students were new to the nursing profession. Many Saudis would make the claim that attitudes toward nursing homes and long-term care facilities among older people are clearly negative (Umeh, 1991;

Albkheil, 1988; Mufti, 2002).

Furthermore, nursing as a professional career is still young in Saudi Arabia – it was only established in the 1960s, in contrast to the extensive nursing history in the UK. Additionally, Saudi Arabia has few institutional places for older people because older people are generally cared for within the family and nursing homes are not accepted in the Saudi culture, although older people still seek hospitals in acute care settings and require nursing care in this context. For that reason, the students understood the status of care for older people as being similar to the status of general nursing from an acute care setting. In the light of this, Parfitt (1998) reported that values, beliefs and practices are found in particular cultures. The expression of care also varies, assuming different meanings in different cultures. Similarly, Sheffler (1995) points out that the Western culture tends to devalue the ageing individual, and this has been reflected in the lower status of working with older people. Meanwhile, in Saudi Arabia, the gerontology nursing speciality is in an early developmental phase and older people are managed and placed like young adults in an acute hospital setting. However, taking the results from the above surveys, it could be argued the current acute shortage of qualified nurses in the hospitals and health centres worldwide dictates an urgent review of present and future nursing training. A major education programme is needed to raise the status of the gerontological nursing profession in both countries.

Interestingly, the cross cultural similarities in intentions to work with older people found between British and Saudi nursing students' accounts are remarkable in several respects in the context of the global nursing profession. Similarly, Parfitt (1998) states:

"There are commonalities about care which can be found worldwide. It approaches the notion of the internationalisation of nursing from a perspective that claims that human care is a universal practice which can be found in all cultural groups albeit with different cultural expressions."

Consequently, health professionals need to be aware of the multiple intentions of health shared by people from different sociocultural, religious and linguistic backgrounds to deliver culturally sensitive health care (Ypinazar and Margolis, 2006). However, these students are in an almost unique position regarding nurses' intentions to work with older people in very different societies and cultures. It is possible to conjecture as to why there may be similarities and differences in some items regarding the intentions to work with

older people by nursing students in two different countries. One possible explanation for the communalities and similarities in the two groups' intentions is that nurses share the professional responsibility and accountability to provide care for anyone in need, regardless of their culture and society: they are very kind and willing to provide nursing care for all patients, whatever their age and background. Similarly, Palmore (1998) described that a shared professional ideology might be an important issue in shaping intentions towards working with older people.

However, there was a diversification of opinions about the status of gerontology between Saudi nursing students and British nursing students. The reason may be ascribable to culture diversity and concerned with the values of older people in society, it may be because of aspects of different gerontological education and student nursing training with older people in clinical placement, or it may be because of the meaning of the status of gerontological work, and the nursing history in each country might be varied. This finding, supported by Reinhardt and Quinn (1979), points out that the aged in Western societies have yet to gain a preferred social status due to generation gaps, and in the Western culture, there is more lack of esteem and role significance for older people than in the Eastern culture.

In conclusion, there was widespread agreement that more active measures should be taken in gerontological nursing, especially in education and training in both countries, to increase the proportion of nursing students who will seek to choose working with older people as a first choice in their future careers. In Saudi Arabia, as with other countries, health care has become increasingly specialized. The specialties have developed in response to technological and social improvement and modernisation, which has influenced the management of older patients. Globally, specialist units and hospitals for intensive care, acute, chronic and surgical treatment have been developed to meet the specific needs of particular disease management strategies for older people. In the light of this, increased training and specialized experience in gerontological nursing are required by nurses who work with older people. However, to increase Saudi nursing students' and health care providers' knowledge about older people by means of a dedicated gerontology education curriculum, it is important to establish their current level of knowledge. This will be discussed in the next sub-section.

6.6 Knowledge about older people

The results of this current study revealed that nursing students from the integrated gerontologic nursing curriculum in three Saudi BSN programs displayed a lack of basic knowledge of the physical and behavioural aspects of ageing. When the mean FAQ score of 11.13 achieved in this study by Saudi BSN program students is compared with those achieved by nursing students in other studies, it is found to be very low. Palmore (1988) reports mean scores of the knowledge scale ranging from 16.25 to 17.50. Other researchers have also reported mean scores in the borderline range, from 17.3 to 18.3 (Lusk *et al*, 1995; Greenhill and Baker, 1986; Williams *et al*, 1986). The findings in this study thus illustrate that Saudi nursing students have, in general, relatively poor knowledge of the physical and behavioural aspects of ageing. Similarly, Zakari, (2005) found that Saudi nursing students lacked knowledge and experience of ageing and their mean score of knowledge was very low (10.69). Moreover, Sheffler (1998) found that the mean score achieved by baccalaureate nursing students was 16.5, which is a borderline score.

Obviously, from the data in this study, a large number of nursing students had not taken any classes on gerontology nursing and the majority had not earned any credits for gerontology courses. This indicates that the educational backgrounds of the students are inconsistent in terms of gerontological education. Furthermore, there is clear evidence from this study that more than half of Saudi nursing students had not provided nursing care for older people during their training at nursing school because nursing students' assignments depend on the clients' acuity levels rather than their ages. Wells *et al* (2004) reported similar findings and criticised the situation of gerontology nursing due to nurses' lack of accurate knowledge of ageing compared to that of other health professionals.

To shed more light on these problems, such deficient knowledge could be expected among Saudi nursing students because the majority of students in the current study had not taken any specific extensive course in gerontology nursing education. However, the inadequacy of basic ageing knowledge in gerontology education programmes was recognized globally three decades ago in a report by the World Health Organization (1976), which suggested

that:

"Care for the older people in hospital and community settings requires, among other things, a thorough knowledge of the process of ageing and of the psychological, sociological and health-oriented aspects of care -indeed, of its person-oriented rather than its disease-oriented aspects"(P.409).

Consequently, the results of the present study indicate that students were deficient in ageing knowledge, which can be explained by the fact that Saudi BSN programs devote relatively little time to gerontology nursing as an integrated course compared with other nursing specialty courses such as paediatrics, maternity and medical surgical nursing. The findings of this study support those of Downe-Wamboldt and Melanson (1990, 1985), who stated that knowledge about older adults did not increase significantly during the integrated curriculum, as clearly shown in this study. In fact, this lack of knowledge about ageing among nursing students is not only a problem in Saudi Arabia but also worldwide (Zakari, 2005).

Alongside this, several international researchers have examined the level of knowledge of students and health care providers toward older people and the majority of studies have shown deficient levels of knowledge about ageing (Fajemilehin, 2004; Fitzgerald *et al*, 2003; Gellis *et al*, 2003; Nolan *et al*, 2002; Philipose *et al*, 1991). However, there is clear evidence from the ageing knowledge scores achieved by Saudi student nurses from this study that they did not feel that they had undergone a valuable education experience in gerontology nursing and had little to offer in this speciality. Similarly, Kaempfer *et al* (2002) point out that in their study, knowledge about older people was very low and insufficient because the students had not taken any courses related to the care of older people.

Consequently, the data in this study provide valuable additional insights for this lack of knowledge among Saudi nursing students, as reflected in the theme pertaining to "inadequate preparation for work with older people", which expressed their lack of accurate knowledge of ageing, which leads some of them to express considerable anxiety about ageing and experience lower esteem in their profession even though they have positive attitudes towards older people. It is likely that these factors will have put some of them off working with older people. Inadequate preparation for a career in gerontology

will influence their knowledge and attitudes as well as their motivation to work with older people (Bianchini, 2000).

Alongside this, it is clear from the demographic data gathered in this study that many nursing students had not taken any classes on gerontology nursing and the majority had not earned any credits for gerontology courses: the results indicate that the educational backgrounds of the students are inconsistent in terms of gerontological education. Similarly, Hughes and Heycox (2006) found a significant correlation between students' scores on ageing knowledge and their attendance on courses on ageing, while Aday and Campbell (1995) concluded that education programs can significantly change nursing students' preconceptions of older people. Furthermore, it is significant from this study that nursing schools' curricula across the kingdom differ and some are deficient in their plans to develop courses for training nurses to work with older people. In the light of this, Zahrani (1983) argues that in Saudi Arabia, allied health professional education is struggling to meet the country's demands and the curriculum should adopt some changes.

However, in this study, teachers agreed that gerontology nursing education will face many challenges arising from current trends in the next millennium: one of these challenges is to prepare nursing students for the gerontology specialty. Similarly, in the United Kingdom, Nolan (1994) asked an important question. In his paper, 'Geriatric nursing: an idea whose time has gone?' he highlighted the need to improve and develop the research base in the nursing international index for geriatric nursing to influence nursing knowledge in this speciality.

Furthermore, Saudi nursing organizations must respond to the demographic changes that are occurring worldwide, which indicate a marked increase in the ageing population. For that reason, caring for the health needs of older people requires a unique blend of nursing knowledge and skills in assessing normal and abnormal physiological, psychological, nutritional, pharmacological and other biopsychosocial reactions in the ageing adult. However, in Saudi Arabia, there is an urgent need for specialized treatment centres for older people, including acute and chronic diseases, with an emphasis on training qualified nurses in this field.

In conclusion, the results of this study can be related to the insufficient focus on gerontologic nursing in the integrated gerontologic curriculum of the nursing schools where data were collected: the gerontology content of these courses needs to have a greater impact on Saudi nursing students to encourage them to consider working with older people as a career choice in the future. Moreover, the nursing curricula in Saudi Arabia should include structured and well planned gerontology courses in the clinical area to introduce students to more knowledge and skills in the care of older people, which it is hoped will eventually be reflected in increased desires to work with older people, because the students will feel more competent and well informed in this professional field. However, further study is needed into the multiplicity of ageing knowledge that nursing students will need, and caring for older people in clinical placements might be supportive of curriculum development in Saudi Arabia. The next section turns attention to the gerontological nursing curriculum.

6.7 Gerontological Nursing curriculum

In these data, there appears to be a gap between the educational needs of gerontological nursing and the current status of curricula and efforts needed to bridge the gaps between theory and practice in the Saudi nursing curriculum. In Saudi Arabia, nursing curricula have been designed to focus on theoretical contents and clinical experiences in specialty areas such as Medical-Surgical Nursing, Mental health, Community Nursing, Maternity and Paediatric Nursing. The focus has been on the young human in our society, with little, if any, emphasis being given to gerontological nursing content. Andrews (1991) emphasized the importance of education and training for nurses and other health care workers in care for older people due to changing diseases and illness patterns in ever-widening health care institutions.

However, from the points raised in this study, there appears to be a disparity between the educational needs of gerontological nursing and the current status of our curricula, because gerontological nursing as an educational specialty is considered "new" in my home country. This disparity highlights a need for suitable places to practice clinical experience, such as nursing homes with ill and well older people, as well as specialist gerontological nurse educators with positive attitudes toward older people. All of these issues can be

considered as challenges for academic nursing in Saudi Arabia, given the increasing need for geriatric nursing to be included in the nursing curriculum. Alongside this, Santos (2000) discussed gerontology nursing concepts and theoretical arguments regarding older people to promote health, prevent diseases, give specific care, aid in the recovery and rehabilitation of older people and maintain their functional capacity.

In this study, the nurse educators who participated in the focus groups pointed out that nursing schools have not addressed this educational need in nursing curricula by providing appropriate clinical experience or role models or working to bridge the gaps between school and clinical placements in gerontological nursing. However, there are many positive and innovative approaches to educating and training nurses to work with older people and improving their awareness of older people's specific needs, biologically, psychologically, socially, spirituality and culturally, in the nursing curriculum. Similarly, Markstrom (1991) drew attention to the need for nursing schools to build and design curriculum models in gerontology education and influence ageing knowledge.

To meet these needs, it is vital to include gerontology nursing courses in the nursing curriculum of nursing schools, as this study suggests. These gerontology courses, whether separate or integrated, are essential to bridge the gaps between theory and practice to improve students' knowledge and change their attitudes toward older people, thus encouraging them to select this type of work as a potential career choice. Similarly, Rogan and Wyllie (2003) proposed that early exposure to older people in nursing education will create positive learning experiences in gerontology nursing education.

To throw more light on this problem, this study found that most of the BSN programmes in the kingdom with integrated gerontology content did not encourage their students to read and used a textbook specialized in gerontology nursing. To increase students' knowledge about older people's care, gerontology text books must be provided, as this will help nursing students to grasp knowledge about older people and how to look after them and provide for their needs in different health care settings. In the same vein, this study result support that an integrated gerontology nursing curriculum may not significantly improve ageing knowledge (Williams *et al*, 2007; Downe-Wamboldt and Melanson, 1990, 1985).

However, this study suggests that Saudi nursing curricula should include more extensive gerontology content and clinical experience with older people in the community in different settings. There will be a need for an increasing emphasis on rehabilitation and health maintenance rather than acute care, with a consequent need for an increased number of health care workers who are well educated in gerontology nursing. Similarly, Nolan (1994) pointed out that community-based provision for the care of older people has expanded and offers new routes for the specialist training of nurses in community settings. This change will increase the demand for more skilful and experienced nurses in specialized fields such as community health nursing for older people. Similarly, Oberski *et al* (1998) suggest that to improve the nurses' skills and knowledge with regard to the care of older people, schools of nursing must emphasise community gerontology nursing. However, no specific curricular guidelines have yet been provided by the Saudi nursing professional organization, but this is suggested as necessary by this study.

Furthermore, the development of an enriched program in teaching gerontology nursing is considered an important and vital issue in the Saudi nursing curriculum. In line with this, Miller (2004) proposed that gerontology design models include assessment of multimedia presentations, learning activities, web-based assignments and case-study assessments and the content of the course should also expand from primarily clinical topics in geriatrics to include the social and emotional issues of ageing to motivate students and influence their attitudes and knowledge. Similarly, Biein (2005) asserted that it was essential to provide holistic health care for older people by training doctors, nurses and other health care workers as multidisciplinary teams to promote the teaching of gerontology knowledge and specialty.

Alongside this, this study suggests that in clinical settings, staff, including faculty members and nurses, must provide students with models of the nursing role. To achieve this, it is imperative that the nursing faculty and staff nurses are aware of their own knowledge toward older people and have accurate perceptions of them, as they are role models for their students. Similarly, Hanson and Waters (1991) point out that faculty involvement in education must come first because the nursing faculty is the most significant in role modelling the specific professional values of students. Furthermore, these teachers will be able to work as role models in developing positive attitudes and afford their teaching efforts toward of the care of older patients, whether in theory or in

clinical practice.

In fact, the goal of nurse educators is to graduate nurses who have a broad knowledge base and the ability to competently meet the needs of their clients. I believe that nurse educators are committed, as a nursing faculty, to assisting the students to develop their capacity in the discipline of professional nursing, and that as professional nurses, they will recognize and respect older people. Similarly, Hweidi and AlHassan (2005) asserted that nurse educators should put a greater emphasis on issues related to the care of the older person in their nursing curricula to promote quality care for this population.

Taken together, this study's results are encouraging nursing educators to adjust the curriculum by adding gerontology content and appropriate clinical experiences to ensure that Saudi graduates are adequately prepared to take care of older people and have sufficient ageing knowledge. Therefore, nursing educators must evaluate their gerontology curricula regularly to identify any deficiencies and initiate the required changes, as indicated in this study. In light of this, Hawk *et al* (2001) maintain the importance of regular evaluation of experiential learning in geriatric courses to encourage changes in the students' knowledge and their attitudes towards older people. However, a primary question that has yet to be addressed is when and how gerontological nursing should be taught. However, I found that in western countries such as the United States and United Kingdom, some nursing educational programs isolate gerontological nursing content into a specialty course, allowing students to focus on the needs of older people. Nursing interventions specific for older people will depend on the educational preparation nurses receive in gerontological courses. Similarly, Hogstel (1990) recommend separate gerontology courses in the nursing curriculum to provide didactic learning experiences with older people. A separate gerontology course offers the best option, particularly if taught by specialised faculty members who can serve as role models and devote their teaching efforts exclusively to the care of older patients (Brower *et al*, 1985).

The growing number of older people in Saudi Arabia needs more focused attention on their needs and health status. In the same vein, Watson (2008) claims that nursing organizations have a responsibility with regard to age: they have to be involved in the organization of care for older people in different care settings such as nursing homes, acute care and long-term care settings, and they need to understand the changes involved in the

ageing process. The impact of these changes will be felt by the young nurses of the future, who will be faced with the challenging task of caring for this older population in a range of different care settings.

In conclusion, having gerontological courses with an emphasis on the clinical skills and knowledge required in caring for older people as human beings in the nursing curriculum will help nurses to understand the ageing process, including changes in physical, psychological and social needs, and will encourage more nurses to begin the challenge of caring for older people. The widespread preparation of nurses by gerontological specialists could have a positive impact on students' knowledge of ageing and care for older people in the clinical arena. Such preparation would not only affect the quality of nursing care toward older people, but would also increase the potential of the graduates to become influential in manpower, community and political activities affecting the welfare of the older people in the Kingdom of Saudi Arabia. The next section focuses on clinical experiences with older people.

6.8 Clinical experiences with older people

The present study has examined nursing students' and faculty members' views, revealing that several factors can greatly influence nursing students' choices toward careers with older people. The result pointed out that clinical experiences with older people might significantly influence nursing students' choices toward work with older people.

This result suggests that clinical experiences with older people are essential to reinforce gerontological concepts and to promote students' understanding and interest in caring for older people. Furthermore, these clinical experiences should focus on the different needs of older people, including health teaching and guidance to maintain wellness. However, clinical experiences at many BSN programmes are geared toward the care of acutely ill older patients who dwell in hospitals and nursing homes. However, it has been shown that, exposure to unpredictable clinical experiences with very ill older people can damage students' attitudes and thus influence their future career options (Stevens and Crouch, 1992, 1995). Conversely Sheffler (1995) and Hartley *et al* (1995) reported positive effects of clinical experiences with older people.

In this light, the focus group discussions in this study revealed that the student nurses had varying experiences in older adult settings, some of which could have had the effect of turning them away from the gerontology specialty, while others would have encouraged them to consider the care of older people as a career choice. Given the importance of clinical experiences in gerontology education, Williams *et al* (2007) suggested a need to explore such issues in clinical experiences that influence students' selection of gerontology nursing as an area of specialization after graduation, as this will be interesting for nurse educators and employers.

Consequently, in this study, nurse educators suggested that positive clinical experience in gerontology can improve the development of nursing students' professional skills by putting theory into practice, and by helping students to choose job opportunities with older adults in future in response to the increasing size of the Saudi ageing population. Alongside this, several studies have explored the effect of clinical placement on nurses' attitudes and willingness to care for older people (Brown *et al*, 2008 a, b; Brown, 2006; Nolan *et al*, 2002; Tovin *et al*, 2002; Hoffman, 2000; Roberts-Rudd, 1984; Tennies-Moseley, 1995). In line with this, in the present study, nursing educators view clinical experiences with well older people as a significant way of improving students' attitudes towards older people. The effectiveness of this view is supported by several previous studies (Eddy, 1986; Ross, 1983; Tobiasson *et al*, 1979; Evans, 1969).

Alongside this, this study showed an appreciation of experiential learning in gerontology education, which is necessary to underpin many of the different types of teaching activities in clinical placement experience, such as health promotion programmes for older people in community courses. Significantly, Brown *et al* (2008) described the importance of the role of clinical placement experience in structuring student nurses' perceptions of gerontological nursing. Perhaps such clinical experiences with well older people in the community will give nursing students a different perspective on gerontological nursing care, which is not apparent either in acute care in the hospital or in the nursing home setting. Similarly, Collins and Brown (1989) report positive outcomes after beginning clinical experience with well older people.

Therefore, this study raised important issues in teaching and learning clinical experiences with older people, such as teaching health promotion to older people in the community, completing functional and physical assessments on older people and encouraging students to visit service agencies for older people during their clinical training. These experiential forms of learning will facilitate the teaching of gerontological content in the classroom as well as in the clinical arena, as the participants in this study suggested. Similarly, Penner *et al* (1984) suggested that the more time staff members spent with older people, the more positive their attitudes. Furthermore, in this study, it was found that nursing students' attitudes after clinical experiences with older clients in their first and last years of study become more positive, regardless of the fact that no extensive course content on gerontology nursing had been presented. In this light, Soderhamn *et al* (2001) reported that attitudes towards older people might change with clinical experience, while Langland *et al* (1986) found a significant improvement in nursing students' attitudes after clinical experiences with older clients.

However, in this study, contact with older people has helped some Saudi students to focus on the positive aspects of this group of patients and enhanced their positive attitudes toward them. Perhaps increasing the amount of time students spend in the clinical area with older people would increase their positive attitude toward them. In contrast, Treharne (1990) found that students' attitudes toward older people became significantly more negative during such clinical experience. These findings concord with a study by Armstrong-Esther *et al* (1989), who point out that attitudes toward older people become less positive as contact with older people increases.

Alongside this, the results in this study revealed that clinical experience alone, without gerontology course content, may not improve knowledge of ageing: the difference in mean ageing knowledge score was not significant. The study revealed that BSN students' knowledge of older people showed only a slight improvement after clinical experience with older people. Similar to this finding, Sherman *et al* (1996) reported that contact with older people in clinical contexts may not improve knowledge of ageing among nurses in a hospital setting. Furthermore, it was concluded that there is a significant difference in the attitudes, willingness and intention of nursing students toward older people before and after completing clinical experience caring for older people in a hospital setting.

In conclusion, this study indicates that clinical experiences with older people have helped some students to develop positive relationships with older people and to understand them more deeply, and these positive and enriching experiences have encouraged them to accept caring for older people as a future career choice. Hence, contact with older people has helped some students to focus on the positive aspects of this group of patients and enhanced their positive attitudes: this is a factor that may eventually influence their career decisions. This will be discussed in the next section, which focuses on work preferences with older people as a future career.

6.9 Work preferences with older people as a future career

In this study, I believe that it was important to explore the reasons why Saudi nursing students do or do not want to care for older people as a future career choice. However, it was found that some nursing students appeared to have developed professionally held images and expectations about the different aspects of their future career choices, while others did not yet have clear views about their future career choices. This task may be affected by personal beliefs, attitudes, values, culture, experience or observations of care for older people. Happell (1999) made the following statement with regard to career preferences among nursing students:

"The career preferences of undergraduate nursing students appear therefore to be strongly influenced by the prevailing ideology of wider society. In considering their future career, students are swayed by the perceived value of youth over age & the perceived importance of technology in promoting the technical role of the nurse" (p.504)

Alongside this, the study shows that nursing students who selected work with older people as a first choice held positive attitudes toward them. This finding supports the assertion that students' attitudes are influential in determining behaviour (Ajzen and Fishbein, 1980). Furthermore, the data reveal that a majority of the students who selected care for older people as a first choice work preference demonstrated the highest score for willingness to take care of them. Additionally, the score for intent to work with older people was higher among students who cited work with older people as their first career choice.

Significantly, there is clear evidence from the present study that there is a relationship between the work preferences of Saudi students and their attitudes toward older people, willingness to take of older people and intent to care for them. Furthermore, statistically

significant relationships were found in this study between attitudes toward older people, willingness to take care of older people and intentions toward the care of older people at all levels of education and all correlations were positive. This was confirmed in a study by Zakari (2005), which found a direct relationship between willingness of the students and their attitudes toward older people. However, in this study, subjective norms are determined by beliefs that specific referent individual or groups approve of the behaviour and motivation to comply with those referents (Fishbein, 1967). Subjective norms (willingness to work with older people) and attitudes toward older people are regarded as the two major factors influencing behavioural intentions and actual behaviour in this study. Furthermore, to gain a better understanding of the attitude-behaviour relationship, I examined the nature of different research behavioural criteria. The results indicate that intention and willingness are the most important factors in specifying older people as the first choice for work after graduation. Similarly, Fishbein and Ajzen (1975) found that a person's subjective norm is viewed as a major determinant of his/her intention to perform a behaviour. Thus a person's behavioural intention is viewed as function of two factors: his/her attitude toward the behaviour and his/her subjective norm. Furthermore, in this study, previous clinical experience with older people was strongly interlinked with work preferences. Consequently, there is clear evidence from this study that significant correlations exist between Saudi nursing students' attitudes toward older people, their willingness to care of older people and their intentions to work with older people at all levels of nursing education.

Moreover, this study found that more than half of the nursing students who participated preferred to work with children, either infants (newborns to 1 year old) or those of preschool age (2-4 years) as a first and second choice, and that more than half of them had previous clinical experience with children. In comparison, few had previous experience with older people, which might be why these are the least preferred age groups to care for. In the light of this, in this study Saudi nursing students prefer to work with children and in other specialities, rather than with older people. Similarly, Kayser and Minnigerode (1975) surveyed all levels of education among nursing students and found that most students were more interested in working with children and adult patients than with older patients. Happell also (1999) found that working with older people is regarded as less preferable than paediatrics. Similar to this result, Delora and Moses (1969) stated that the "most desired" group for nurses to work with were children under twelve, while the older people

were the "least desired".

A recent population, health and human well-being report for Saudi Arabia indicates that the total population is 23.01 million people, of whom 42% are children under the age of twelve, and this represents a high birth rate. Furthermore, nursing school curricula provide paediatric course and special clinical training with children, taught by specialty paediatric nursing staff, and all of these factors could contribute to the explanation for students' preferences for working with different areas rather than older people. Davis (1980) recommends that changes in the demographic situation in Western countries mean that there is a need to reduce the number of maternity and paediatrics courses and replace this material with gerontology content. However, in Saudi Arabia, the birth rate is still high and there is a need for need for maternity and paediatrics courses as well as gerontology nursing. On the other hand, this is a problem not only in Saudi Arabia but also globally: gerontological nursing is still an unpopular specialty and nursing students' interest in pursuing it as a career decreases during their education (Slevin, 1991). Several studies indicate that there is a crisis in health care, as student nurses do not want to work with this population, regardless of whether or not they have positive attitudes and intentions toward them (Bergland and Laerum, 2002; Kuhn, 1990).

Alongside this, in this study, the nursing students' work preferences were further explored through the open-end questions included in the survey, which suggest several possible explanations for this result. Inadequate preparation of nursing students in terms of a lack of knowledge and clinical experiences and skills relevant to the care of older people have led some of them to feel powerless and incompetent, and they recounted their limitations in learning experiences in the clinical arena with different older people in a variety of situations, including hospitals, nursing homes and community settings. Conversely, Dellasega and Curriero (1991) and Lusk *et al* (1995) found that nursing students tended not to want to work with older people regardless of the types of gerontology experiences they had had.

This study found that clinical experiences with older people serve as focal points in student nurses' concepts of care for older people and have a great impact on their career choices and preferences towards working with older people. Nevertheless, this study supports the present finding that nursing students following an integrated curriculum had less

opportunity to practice the care of older people as career choices (Brower *et al*, 1985). Similarly, Atchison and Bryant (1988) claim that most nursing curricula have very limited clinical experiences in gerontology nursing.

However, efforts to improve gerontology nursing education in Saudi Arabia must be focused primarily on the nursing curriculum in nursing schools, as this study suggests. There are many positive and innovative approaches to encourage nursing students to work with older people, especially in clinical experiences with older people: a positive approach in training and teaching gerontologic nursing might need to be advanced in some way to be more attractive and interesting for nursing students. Alongside this, Brown *et al* (2008 a) reported that working with older people is often not an obviously attractive career option in the UK, and the importance of students' placement experiences as enriching environments and the factors to enhance this enriching environment are considered to improve the view of gerontology nursing. Similarly, Williams *et al* (2006) reported that positive clinical experiences with older people have been found to improve students' attitudes and increase preferences to work with older people.

In this study, as mentioned before, a large proportion of Saudi students had no clear indication of which direction their careers might take, i.e. if they would be working with older people or not. It is apparent that most of the students' futures had not yet been conceptualised in any clear manner. Steven and Crouch (1995) indicates that in the next two decades, increasing needs for qualified nursing in the gerontological specialty will arise, not only in hospitals but also in other structures and organizations in the community. However, in this study, there was a consistent emphasis on the rewarding aspect of caring for older people through clinical training, which can foster a movement towards more positive, interesting and enriched experiences in older patient care among nursing students. The findings of Meyer *et al* (1980) have important implications. They suggest that having a positive attitude doesn't indicate that more nurses will work with older people. They also report that nurses who had more previous experiences working and living with older people are more likely to choose to work in a geriatric field. Perhaps increasing the amount of time students spent in the clinical area with older people would increase the possibility that nursing students would want to work with older people after graduation.

Given the growing number of older people in Saudi Arabia, I believe that there is a need for more interdisciplinary training of allied health students with a concentration on gerontological education. The increasing recognition of the importance of teaching gerontological nursing content to nursing students was the primary reason for this research. Furthermore, in this study, it was found that the care of older people ranked as the least or second least preferred clinical specialty in this study. Despite the increasing number of older people in Saudi society, no general standard for the gerontology speciality has been established in Saudi Arabia, in contrast to other developed countries such as the UK and the USA. Notwithstanding, current study found that nursing students tended to hold positive attitudes toward older people, but they reported little or no interest in employment in the gerontological nursing speciality or in dealing with older people in their future careers. Furthermore, previous and current negative clinical experiences of working with older people often put students off this area as a future career. These unpleasant experiences were cumulative in the reality of working with older people with which students were faced, and practices in the clinical area, whether as part of their training or not, may corrode positive attitudes towards older people. Brown (1971) studied nurses' attitudes related to certain patient characteristics. She hypothesized that nurses would not value older persons who exhibited certain behaviour, e.g., "soils clothing and bedding with food". This may have been the case in this study, explaining the ranking of work preferences, as this view on gerontological nursing has not yet changed, despite continuous improvements in the nursing profession and more advanced nursing practices in the gerontology speciality.

This view of gerontological nursing was clear when nursing students ranked gerontology as the least or second least preferred clinical speciality. In addition, this finding is supported by several prior studies (Nolan *et al*, 2002; Tollett and Adamson, 1982; Kayser and Minnigerode, 1975), which have noted that student nurses have little interest in working with older people, usually ranking it as their lowest work preference in relation to other areas of nursing. Here again, I need to emphasise that uncertainty about the nature of working with older people was identified in this research, not necessarily because of older people themselves but because of the nature of the environment in which older patients have been encountered and the status of the work.

The increasing number of older people in Saudi Arabia should lead to pressure to increase the quantitative and qualitative gerontology courses in nursing educational programme and curriculum, which will accomplish this purpose. There was also recognition from the participants in this current study that there is a need for more contents related to gerontology in nursing curricula as a means of addressing this problem. In particular, I noted that there is general agreement within nursing students in the three nursing schools regarding the insufficient number of students who are interested in working with older people due to exposure to the strong subjective norms.

As a teacher in nursing schools, with more 10 years' experience working as a student preceptor with nursing students, I frequently identify nursing students' desire to help others as a major reason for entering nursing. While the opportunity for service to others within gerontology nursing is probably clear to most, it may be difficult for some to imagine any source for advancement and personal growth and challenge within one's career. Similarly, Weisman *et al* (1981) reported that the lack of autonomy in gerontological nursing was a major source of job dissatisfaction for nurses. Changing students' work preferences toward working with older people has become the basis for much of the gerontological course planning in nursing curricula. Furthermore, educators in the nursing schools from different level of nursing education, such as diploma and BSN nursing degrees, are responsible for increasing the number of graduate nurses interested in working with older people in a variety of health settings, especially in nursing homes.

Nursing educators still have many unanswered questions, which I have tried to explore and answer in this current study, such as what should be done within nursing programmes to increase students' interest in gerontology nursing as a career after graduation. How can the number of Saudi nurses interested in working with older people be increased? However, even after this study, factors that influence interest in working with older people remain in question. It is still unclear, for example, how useful studies are in the context of the attitude - behaviour discrepancy as regards the care of older people as a future career. However, this study has identified that the factors that appear to be most influential as regards work preferences with older people seem to be clinical placement with older people, educational level, including methods of teaching, the availability of gerontological courses and faculty members' background in gerontology nursing. Moreover, past and

current clinical experiences with older people were identified as potential correlates requiring further study.

This study has illustrated that when nursing students who lack the gerontological knowledge and skills essential for the provision of adequate care to ill older patients are placed in inadequate environments such as those frequently found in nursing homes, it is to be expected that these experiences will affect their career choices and such environments will be the last places they will seek to work in after graduation. The current study's findings support Dougherty (1981), who reported that nursing students were reluctant to work with older people at the end of their training because they encountered poor standards of care and a lack of motivation and expressed the feeling that gerontological nursing was stigmatised. However, Dougherty (1981) explained that nursing students enjoyed working with older individuals, although they did not necessarily intend to work with them, and they said that they "Liked elderly people as individuals".

Furthermore, the finding of the current study that nursing students dislike their experiences with older people in nursing homes was expected and is consistent with general Saudi societal and professional beliefs about nursing homes. In addition, these beliefs about poor quality care and unpleasant working environments that help to deter students from working with older people will impact as strong subjective norms in their future careers. Similarly, many Saudis would make the claim that attitudes toward nursing homes and long-term care facilities among older people are clearly negative (Mufti, 2002; Umeh, 1991; Aba Alkheil, 1988). This could explain the lack of association between experiences of care of older people and preferences for work with older people as a career choice in this study.

To change work preferences toward older people, we must change the students' exposure to older people in poor quality environments in the clinical arena: this is probably the most important factor in changing their vision toward gerontology nursing. Nursing students who have positive perspectives on working with older people should also be encouraged to share their vision with their peers to improve the image of gerontological nursing.

Furthermore, nursing students should be encouraged to express and discuss their negative views about working with older people as a future career. Attention to clinical experience with older people is the most important factor to change views about gerontology nursing.

For that reason, nursing homes must be carefully selected for such experiences. Furthermore, the positive aspects of clinical experiences with older people, such as autonomy of practice and the personal rewards of working directly with older people needing help, should be the focus of Saudi nursing education. Those impoverished places that provide a questionable quality of care in the clinical area should not be used for students' training experiences in nursing schools. Furthermore, in this current study, the students felt that older people should be within their home environment, they should receive help from their relatives and they should not die in nursing homes. Similarly, Meredith (1995) points out that due to failures to establish good quality care for older people in institutional environments, many older people prefer to stay in their own homes.

Moreover, it may be necessary for nursing schools to develop a relationship with nursing staff in elder care settings to provide opportunities for positive experiences through affiliation between the clinical placements and the schools. The collaboration of nursing schools and clinical elder care settings to develop plans for teaching gerontological nursing is considered a new notion in Saudi nursing education and is recommended by this current study.

Alongside this, faculty members and nursing staff should act as role models for nursing students in delivering innovative, high-quality care to older people in all types of settings. The literature suggests that the attitudes and values of future health care providers may have an impact on their desire to work with older people as well as on the quality of care being delivered to them (Pursey and Luker, 1995; Ahmed *et al*, 1986). Since work preferences are influential in shaping students' future selection of work speciality, it is important to be aware of views from faculty members. Nursing faculty members who are selected to teach gerontological nursing should be qualified, interested and skilled in this speciality. However, this current study showed that the educational background of faculty members was a major factor in determining what is taught in the specific course speciality in integrated gerontology nursing, and any programme curriculum will reflect the collective education background of its staff.

Moreover, since the current cohort of nursing faculty members have little educational preparation or experiences in teaching gerontology, it should not be surprising that so little is actually taught, as I found in this current study. The practice of assigning faculty

members to train and teach gerontology content without regard to their speciality and interest in gerontological nursing should be reviewed and considered by administrative staff in nursing schools. For many Saudi nursing schools, this will mean the recruitment of new or further education of existing faculty members to teach gerontology nursing. Furthermore, this study reports a decrease in the proportion of faculty members who specialize in gerontological nursing. Enthusiasm and skill in gerontological nursing, or the lack thereof, were quickly noted by nursing students in this study. Nursing education should emphasise gerontological nursing, as it does with paediatric and maternity nursing.

However, in this study, it was clear that there is still no concurrence among nursing educators about what types of educational experiences produce Saudi nursing graduates who want to work with older people and choose gerontology nursing as their specialist area. Currently, the status of gerontological education in Saudi Arabia in the education of nursing and health professionals is unclear, and this is an influential variable in this study as regards the poor ranking of work with older people as a future career.

Significantly, I consider that a future challenge in the nursing education programme in Saudi Arabia is to establish gerontology nursing as a professional nursing career. I hope to use the premises or assumptions from this study in developing gerontological course-work and positive clinical experiences with older people. In addition, special skills and knowledge are needed to work effectively in the gerontology field to increase interest in working with them as a future career (Perrotta *et al*, 1981).

Gerontology courses must be well planned and contain liberal amounts of positive clinical experience with ill and well older people if they are to be consequential in changing work interests and improving the status of gerontological nursing in Saudi Arabia. Furthermore, positive experiences in caring for well older people in the community could lead to such work interests. Without such content, students will experience feelings of inadequate preparation as they attempt to care for older people and the desire to avoid such work is likely to be strengthened.

Currently, the Saudi nursing programme, which has little content and clinical experiences in the care of older people, conveys an inherent message that such work has little status and value in the nursing profession. However, this current study provides information that

will be helpful for decision-makers in planning educational programmes in gerontology nursing within nursing schools. The results of the study provide an additional rationale for questioning the efficacy of changing nursing students' performances toward working with older people. The major significance of the study is that it provides recommendations to nursing schools for more effective curriculum development and planning in gerontological nursing. Improving nursing students' views about the consequences of employment in gerontological nursing should increase their interest in such work, and thus should become a major assumption when planning nursing curricula. This challenge could be a major influence in stimulating the change needed in gerontological nursing. In the meantime, this study may have some positive effects even in the present environment. It identifies positive attitudes toward older people among nursing students, which can be used as motivators to improve students' work preferences toward working with older people. Ultimately, this study could have a positive influence on the number of graduates who are willing to work with older people. However, the more immediate consequences of the study would be changes in nursing curricula, which will improve student nurses' work performances toward gerontology nursing.

On the other hand, my commitment to increasing the number of nursing students still faces considerable difficulties. Several negative aspects of gerontological nursing were found in this study, which cannot be altered by educational intervention alone. One such factor is the quality of care and lack of multi-facility care services for older people, such as gerontological clinics and proper nursing homes.

Recommendations for improving the clinical practice environment in terms of the quality of life for Saudi older people are urgently needed. However, progress in several these areas will require changes in the way older people are viewed within Saudi social policy and the larger health care system. Reforms of the health care system for older people are urgently required to elevate the status of gerontology to the same level as other speciality areas. Nursing home reform and transformation is one of the major future goals for many concerned with the social welfare services. Moreover, it is hoped that the results of this study will lead to changes in gerontological nursing, including the practice environment, which will positively influence work preferences for Saudi nurses.

In conclusion, this study has highlighted a variety of issues that should be addressed by both nursing schools and higher education, which may be able to contribute to increased recruitment of new graduates working with older people. In Saudi Arabia, if society's expectations of quality care for older people are to be achieved in the next century, then student nurses will need to view working with older people as providing a more attractive and bright future if nursing wants to keep the gerontological specialty within its professional field. Saudi nursing students need some career counselling to direct them to a specialized area that the country needs, such as the gerontological nursing speciality, due to the increased number of Saudi older people. Furthermore, education and training in the gerontological specialty in clinical placement should be seriously considered at the undergraduate level. An important factor in improving students' desire to work with older people is providing them with an opportunity to acquire positive and pleasant clinical experiences in different settings.

6.10 Summary

In conclusion, this study has identified favourable and positive attitudes toward older adults among Saudi nursing students. These findings suggest that students already hold positive attitudes towards older people on entering the BSN program and at all levels of nursing education, and that these attitudes are influenced by the cultural, religious, family and social context of Saudi Arabia. Statistically significant relationships were found between attitudes toward older people, willingness to take care of older people and intentions toward the care of older people at all levels of education and all correlations were positive. In the light of this, intentions and willingness are the most important factors in specifying working with older people as the first choice for work after graduation among students.

On the other hand, the study results indicate that the educational backgrounds of the students are inconsistent in terms of gerontological training. Some of them are not receiving enough gerontology training and there is a lack of clinical training with older people, factors which lead to insufficient knowledge of the physical and behavioural

aspects of ageing among nursing students. These constraints are the major reason why Saudi nursing students cite work with older people as their least preferred career choice.

Considering the cultural and religious teachings about the care of older people in Saudi Arabia, it is remarkable that such a high number of students ranked older people as their least preferred group with whom to work after graduation. Moreover, this research suggested the potential for clinical training experience with older adults in nursing school to improve attitudes, willingness and intentions to work with older people. However, if Saudi nursing students are to make career decisions to work with older people, they should have the opportunity to experience the reality of working with them at nursing school and to practice nursing care with older people in different settings.

Consequently, these study findings indicate that clinical experience in gerontology can improve the development of nursing students' skills by putting theory into practice, and can thus encourage students to choose job opportunities involving work with older adults in future in response to the increasing number of older people in Saudi Arabia. In the light of this, this study suggests that schools of nursing should include gerontology courses in their curricula and that students must be provided with clinical experience in institutions and be taught by specialist staff to encourage their interest in this increasingly important field of specialization to raise the quality of care for older people in Saudi Arabia. This would result in positive and rewarding experiences in the clinical placement for both older adult clients and the nurses themselves. The next chapter turns attention to the implications and recommendations of the study.

Chapter 7

Conclusions and Recommendations

7.1 Introduction

The quantitative and qualitative findings from the present research have led me to make several recommendations for nursing education and research, administration practice and policy, with the crucial goal of improving services for older people in Saudi Arabia.

7.2 Implications for Nursing Education

Based on this study's findings, the following recommendations are made for nursing education:

- 1- In light of this study's findings, it is suggested that consideration should be given to the inclusion of more structured gerontology courses in the general nursing curriculum. This study's results can be related to the insufficient focus on gerontologic nursing in the nursing schools where data were collected. The gerontology content needs to have a significant impact on Saudi nursing students to encourage them to consider working with older people as a career choice in the future. I suggest that more emphasis on gerontologic theory and clinical training is urgently needed in the BSN programme in response to the increasing size of the Saudi ageing population.
- 2- The school of nursing should provide gerontology specialist staff, gerontological textbooks and continued education courses for those teaching gerontological nursing. Specialized faculty members are needed, who have education and training in gerontology nursing and are able to forge links between theory and practice in gerontology education. Faculty members must take the initiative and inform themselves by attending short and condensed courses and training programmes in gerontology nursing. The present study explored the need for gerontology nurses staff, which dictates that more continuing education programs must be developed for the nursing population.
- 3- This study recommends that geriatric clinical experience be planned according to structured learning objectives to provide a more specific learning experience with ill and well older people. The schools should consider the clinical placement for training nursing students in high-quality environments, either in the hospital or in

nursing homes, to create a more positive image of the status of the gerontology specialty. Because nurses continue to provide a large portion of contact and health care services to older adults, nursing education programs can play an important part in the acquisition of appropriate knowledge by student nurses and the shaping of their attitudes toward older adults in different institutions.

- 4- A variety of teaching clinical experiences with older people can be used to promote students' contact with all types of older adults, ill and well. These clinical experiences should focus on the varied needs of older people, including health teaching, communication and guidance on the maintenance of wellness. Initially, BSN students should have contact with well older people, and they should receive subsequent guided practice with acutely ill patients requiring advanced nursing care. Moreover, the roles of the nurse are changing very rapidly, as the major part of health care moves now into the community setting. It is essential to expose nursing students to ill and well older people in the community to improve communication and relationships with older people, as this study has confirmed.
- 5- The study identified the fact that the development, implementation and evaluation of appropriate interventions and continuing education programmes focusing on the care of older people are vital to increase students' awareness and knowledge of gerontology nursing in Saudi Arabia. In addition, the nursing curriculum should emphasize the education of nurses at all levels, undergraduate and post graduate, with dedicated courses on the care of older people to improve students' knowledge of gerontology and their interest in working with older people.
- 6- This research recommends the regular evaluation and implementation of gerontology programmes in nursing schools to maintain further improvements in the care of older people in nursing curriculum. Indeed, the knowledge and skills gained from the gerontology program will increase student nurses' confidence, empower them in the clinical area working with older people, and encourage them to select gerontology as a future career specialty, which will help to address the shortfalls in gerontology nursing and improve the quality of care for older people in Saudi Arabia.

7.3 Nursing research

The study's findings highlight some important considerations for future nursing research:

- 1- Saudi demographic data predict that in years to come, a large proportion of the population will be older people, so nursing students will inevitably have increased contact with older patients, regardless of whether or not they indicate a preference for such contact. The implications of this emphasise the need for continued research to improve nursing students' clinical experiences with older people and understand that student nurses need exposure to well older people in the community, as well as those who are ill, and how that will affect their desire to work with this patient group.
- 2- Longitudinal studies are recommended, comparing students' attitudes toward older people and their levels of knowledge of the ageing process after gerontology courses. Such research may provide additional information concerning the effect of gerontological learning experiences on attitudes, knowledge and career choice to work with older people.
- 3- Research is needed to build standardized tools for the assessment of attitudes, intentions and knowledge of older people that are specific to the Saudi community and reflect its norms and cultures.
- 4- Further, qualitative research is recommended to explore the essence of attitudes toward older people and their care among nurses and staff nurses, and the ways these attitudes promote or interfere with the quality of patient care. studies should be expanded to include more diverse cross-cultural samples and different genders among employers and staff nurses.
- 5- All students and their teachers recruited in this study are from the three government Nursing schools in three major cities in the kingdom. Diploma level Nursing schools, for example, may have different views on teaching older people care. Future research is recommended to explore the comparison between the two curricula in teaching the care of older people. Insights gained from exploring this perspective will improve the teaching of gerontology nursing in nursing schools in Saudi Arabia.
- 6- In this study, the sample was entirely made up of female participants. It must be noted that the experiences and attitudes of the male Saudi nurses could be different or could share some similarities toward older people care. Further research is needed to compare females' and males' attitudes towards the care of older people in Saudi

Arabia.

- 7- The study explores the many experiences of the nursing students in nursing schools, but these experiences might change over time, especially after graduating and working with older people in the hospital as staff nurses. Future research is recommended to follow up the students for a longer time.
- 8- Additionally, research should be directed toward improving environments for the care of older people, such as nursing homes, and elevating the status of gerontology as a profession in Saudi Arabia. This would improve job satisfaction, increase the popularity of work with older people as a future career option and promote the status of gerontology nursing.

7.4 Nursing policy

The following recommendations for nursing policy evolved from the results of the study:

- 1- Since gerontology nursing in Saudi Arabia is a new field and not a prominent speciality, there is clear need for health planners from the Saudi Ministry of Health and Ministry of Higher Education to provide suitable facilities that will encourage nursing students to engage in this speciality. These facilities should include increased motivation in the form of financial rewards, job satisfaction and scope for professional enhancement and continued education in gerontology nursing, to improve the status of work with older people and attract more nursing students to this field.
- 2- Health planners from the Ministry of Health and Ministry of Higher Education should develop a policy that will help nursing students and nurses to engage to work with older people as a future career and support teaching, active engagement in the clinical experiences and knowledge sharing.
- 3- Moreover, the Saudi welfare services and health planners should be encouraged to provide good quality nursing home services for training in the care of older people, similar to those in Western countries, such as residential accommodation, sheltered housing and rest homes for older people, in a way that will be culturally and religiously acceptable. These places will offer a better environment for older people themselves, especially emigrants without family support, as well as enabling adequate training experience for nursing students that will attract them to work with older people after graduation.

- 4- Some of the nursing students who participated in this study did not yet have clear views about their future career choices. In light of this, health planners in the Saudi career services need to direct these students towards work with older people as a career option after graduation and encourage them to explore the advantages of working with older people as a future need for Saudi Arabia.

7.5 Contribution to knowledge

This study is the first research in the field of gerontology education to examine links between nursing students and their teachers in Saudi Arabia; no published study has ever reported both students' and teachers' views concurrently toward gerontology education in undergraduate nursing courses. It therefore provides a contemporary description of student nurses' attitudes, knowledge of ageing, intentions and willingness to work with older people, and highlights the need for gerontology courses in the undergraduate nursing curriculum with more emphasis on healthy older people in the community.

Significantly, the Theory of Planned Behaviour (Fishbein and Ajzen, 1975) is the conceptual model for this study and provides a mechanism for identifying factors that would help to predict positive behavioural intentions to work with older people among Saudi nursing students, and some of these factors are amenable to interventions in the care of older people. The conceptual definitions of all of the components of the theory are adequately described in this study and are partly consistent with the theory. The fact that the findings from this study support the value of the TPB in a non-Western culture suggests that the efficacy of the TPB extends beyond the West. In spite of strong cultural differences between settings where the TPB has been tested, there seem to be some elementary human forces (social and psychological) that responsible as a function in certain types of individual behaviour.

This study used a scale developed by Nolan *et al* (2002) to measure intentions to work with older people; this scale consists of 15 items and was constructed in a western country to involve three important aspects of intentions toward work with older people. However, this study found that the instrument had acceptable psychometric properties and aspects of its reliability and validity were established for the first time in this study. The reliability of the scales was checked and α was found to be greater than 0.7, indicating that the scale is

reliable.

In addition, this study, for the first time, shed light on potential similarities and differences in intentions to work with older people between Saudi student nurses and British students nurses in two geographically dissimilar Eastern and Western locations. As a researcher in gerontological nursing, I found this comparison and exploration of the similarities and differences between Saudi nursing students and British nursing students very significant, especially as it may be possibly due to a shortage of nurses due to increased nursing globalisation in moving staff nurses worldwide. However, exploring the type of this learning experience towards working with older people from the viewpoints of geographically diverse groups of nursing students could promote this as an interesting area where the major goal is to improve the status of gerontology in both countries.

This is the first study in the kingdom of Saudi Arabia to listen to the nursing teachers' voices and enable them to share their views as to how such learning approaches to the care of older people could be implemented within nursing education. It has highlighted the need to provide qualified staff to teach gerontology courses and maintain continued education programmes on the care of older people. Hence, this study recognizes the role of nursing schools in designing undergraduate curricula in gerontological nursing and suggests that they should offer structured programmes on ageing, and that these curricula should strategically explore both theory and clinical experiences to encourage positive knowledge and attitudes toward ageing among nursing students. It is argued that nursing schools should provide more gerontology courses that combine theory and practice for cooperation between schools and clinical placements, which should be actively monitored and supported. Moreover, nursing academics are encouraged to develop strategies and plans with regard to gerontology education, as it is essential to ensure that nurses are well prepared for the future and encouraged to become more interested in working with older people in Saudi Arabia.

7.6 Limitations of the study

This study has several limitations that should be acknowledged, some of which arise from the data collection process. This study relied heavily on a focus group made up of nursing teachers rather than students. Secondly, the detailed nursing students questionnaires and the original instruments used in this study were developed in Western countries, and while I used versions that had been modified to be compatible with the Saudi culture, some attitude items still may not have been easy to interpret in terms of the societal context. The third limitation in this study is that I was unable to observe clinical experience due to time limitations, and was thus only able to consider pre and post-test measurements when determining the effects of the 32 weeks clinical nursing practice on student knowledge, attitudes, willingness and intentions/work preferences towards the care of older people.

In this study the decision was made to conduct focus groups with teachers rather than students, as time is precious for students on nursing programmes, due to their extensive commitments to both lectures and clinical placement training in different hospitals and health disciplines. Furthermore, student schedules varied considerably depending on their stage in the nursing program and the courses they were taking, which complicated the process of arranging times suitable for everyone to attend the focus groups discussions. It was felt that some students may have been reluctant to participate in, or even attend, focus group discussions due to limited time and transportation problems, especially if they were on their clinical placements in different hospitals far away from their universities. Furthermore, I considered that teachers may be more able to articulate their views as they were more mature and experienced whereas – and this may be a cultural issue – focus groups may not have been as informative with students as students in my culture would not be as willing as teachers to talk in a group and I felt that the possibilities of getting good information were limited.

If I wanted to conduct this study differently, I would seek to minimize the existing limitations. Ideally I would seek to develop new instruments, or at least modify existing instruments, so that their cultural sensitivity and relevance was enhanced. Therefore I would instead concentrate on collecting the qualitative data first, including individual student interviews and focus groups with their teachers. This would enable me to derive and develop instruments directly from the qualitative data to measure the attitudes and

intentions of nursing students toward working with older people from their culture and society. However such an approach was beyond the time and resources realistically available to me.

However, driven by this study, my future plan is to develop a nursing scale to measure nursing students' attitudes and intentions toward working with older people in my home country based on thematic content from the qualitative data results obtained from in this study, from nursing students and their teachers views towards the older persons' in general and gerontological nursing in particular. However, further research is necessary to explore the range of wider issues in the preferences of for working with older people, especially the influence of social norms, both cultural and professional, and the role played by perceived behavioural control.

7.7 Conclusion

This study's exploration of data from a questionnaire survey and focus group discussions provides insights into nursing students' and teachers' views toward the care of older people in Saudi Arabia. This study set out to explore the attitudes, knowledge, willingness and intentions among nursing students with regard to work preferences towards the care of older people, and to shed light on the role of nursing educators in gerontological nursing using three major government universities in Saudi Arabia.

This study's results provide rich and in-depth data, in both quantitative and qualitative forms, from nursing students and nursing teachers with a wide range of experiences with the older patient population, across three nursing schools in different universities in three regions of the kingdom of Saudi Arabia. This study concluded that the majority of the nursing students from the integrated gerontological nursing curriculum in three Saudi BSN programmes who participated in this research displayed a lack of basic knowledge of physical and behavioural aspects of ageing.

Alongside this, the qualitative data represent a need for greater effort in the preparation of nursing students, with the provision of integrated skills and knowledge in the care of older people. Additionally, the research findings emphasized that qualified specialist teachers should be provided in nursing schools as positive role models. Exploring these important issues will provide a baseline for the education of Saudi nursing students and will enhance health planners' awareness of issues related to the future of care of older people, the

quality of which is likely to reflect the insufficient knowledge of ageing among Saudi nurses.

On the other hand, this study examined Saudi nursing students' attitudes towards older adults, and it was found that the students generally held favourable and positive attitudes towards this group. Furthermore, the Saudi nursing students' willingness to take care of older people and their intent to work with older people were also illustrated by means of the Intent to Work with Older People scale. These positive attitudes are strongly influenced by Saudi Arabia's cultural, social and religious backgrounds, as well as family and women's responsibility, which were reflected as positive significant influences and strong foundations that students bring to bear in developing positive perceptions toward older people.

Furthermore, the present study found that British and Saudi students are similar in that they have a positive view on most items towards intentions of working with older people. The cross cultural similarities in intentions to work with older people found between British and Saudi nursing students' accounts are remarkable in several respects in the context of the global nursing profession. Health planners should motivate nurses through exploring these issues in schools of nursing to increase the number of nurses specialising in this field.

Significantly, these data revealed the potential of clinical training experience with older adults to improve the previously mentioned variables (attitude, willingness and intention). However, there needs to be a consistent emphasis on the rewards of caring for older people throughout clinical training, which can foster a movement toward a more positive interest and enriched experiences in older patient care among nursing students.

Alongside this, the study explored Saudi nursing students' career choices and preferences with regard to working with older people. I believe that an important aspect of this is the exploration of the reasons why Saudi nursing students do or do not prefer to care for older people. If Saudi nursing students are to make career decisions to work with older people, they should be given stronger motivations to work with older people, such as increased knowledge and skills to create a sense of competence and the potential for continued education in this speciality.

Additionally, this study's focus group discussions explored important aspects of nursing education, sharing nursing faculty members' views and recommendations regarding the teaching of gerontologic nursing in undergraduate nursing curricula. This is the first study in the kingdom of Saudi Arabia to listen to their voices, and the inspiration and insights gained from exploring this perspective will improve the teaching of gerontology nursing by influencing health planners' strategies for the care of older people. Future research is recommended.

Consequently, this study suggests that more emphasis on gerontological curricula and training in the BSN programme is urgently needed in response to the increasing Saudi ageing population. Indeed, efforts to improve undergraduate education in gerontological nursing are needed, including content and clinical experiences in the care of older adults, if the growing numbers of older people are to receive competent nursing and health care. Therefore, administrators of nursing programmes in Saudi Arabia must encourage and support efforts to improve gerontological nursing between school and clinical placements within the undergraduate curriculum, and specifically, they must promote faculty and student research in gerontological nursing practice and education, and provide continuing education activities in gerontological nursing for nurses working in practice settings.

I hope to use the knowledge gained from exploring these perspectives to inform baccalaureate nursing curriculum development in gerontology and implement comprehensive health care delivery for the Saudi ageing population. Saudi health ministers, nursing educators, health care planners and administrators should work together to develop a gerontology program with more emphasis on clinical experiences with older people that will promote the training of Saudi students in the care of older people and enhance their knowledge of ageing to encourage them to work with older people in future in Saudi Arabia.

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Appendix A

Survey questionnaires

**An exploration of attitudes, knowledge, willingness and future intentions to work
with older people among Saudi nursing students in baccalaureate nursing schools in
Saudi Arabia**

1. What is your age?

2. What is your university?
.....
3. What is your level of study? (one answer).
 - A. First year
 - B. Second year
 - C. Third year
 - D. Fourth year
 - E. Internship year
4. What is your marital status? (one answer).
 - A. Single
 - B. Married
 - C. Divorced
 - D. Widowed
5. How many children do you have? (one answer).
 - A. None
 - B. One
 - C. Two
 - D. Three
 - E. Four or more
6. Do you consider yourself to be? (one answer).

- A. Very Religious
- B. Religious
- C. Somewhat Religious
- D. Not religious

7. I believe that there is a relationship between my religious affiliation and my desire to work with the elderly. **(one answer).**

- A. Yes
- B. No
- C. Undecided

8. Are there any elderly people aged 60 or over living in your home? **(one answer).**

- A. Yes
- B. No

9. Did you work with older people before starting your training? **(one answer).**

- A. yes
- B. No

10. Do you currently work with older people outside of your training programme? **(one answer).**

- A. No
- B. Yes

11. What was your experience of older people? **(one answer).**

)

A. Caring for older family members.	
B. Voluntary work	
C. Working in a hospital	
D. Working as a support worker	
E. Working with older people in any other specific capacity	
F. Visiting in a nursing home	

G. Working in a residential or nursing home	
H. I have no experience of older people	

12. How often do you come in contact with people age 60 or over? (one answer).

- A. Daily
- B. Twice a week
- C. Weekly
- D. Once a month
- E. Never

13. Have you cared for elderly persons in your nursing practice? (one answer).

- A. No
- B. Yes

14. Do you have any knowledge about ageing or the elderly? (one answer).

- A. No
- B. Yes

15. What is the dominant source of this knowledge? (one answer).

- A. School
- B. Nursing College
- C. Family and friends
- D. Media

16. If the source is nursing college, describe:

- 24. Number of courses _____
- 25. Number of credit hours _____
- 26. Type of course: theory _____ clinic _____ both _____

17. What factor do you think could have the greatest influence on nursing students' career choice toward the care of older people? (one answer).

- A- Teaching methods of gerontologic nursing.
- B. Past experience with older people
- C. Attitudes of nursing teachers as role models.
- D. Peer group
- E. Clinical experience
- F. Other.....

Knowledge of Ageing

In the knowledge section, the questions are multiple choices. Please consider each question carefully and circle the appropriate answer **(Only one). This questionnaire is not an exam and will not affect your grade. The data will be used for research purposes only and will remain completely anonymous.**

1. Modified Palmore's Fact on Aging Quiz 2

Circle the correct answer. There is only one correct answer.

1. The life expectancy of a Saudi person at age 60:
 - A. Is higher than that of other Gulf countries
 - B. Is lower than that of other Gulf countries
 - C. Is the same as that of other Gulf countries
 - D. Has never been determined
2. The life expectancy of a Saudi man at age 60 as compared to a Saudi woman of the same age is:
 - A. Higher
 - B. About the same
 - C. Lower
 - D. Has never been determined
3. Among the elderly, which of the following statements is correct?
 - A. The number of widows and widowers is about equal
 - B. There are nearly 5 times as many widows as widowers
 - C. There are nearly twice as many widowers as widows
 - D. The number of widows is rapidly increasing
4. Among the elderly, the proportion of the widowed:
 - A. Is rapidly increasing
 - B. Has remained the same in the last half-century
 - C. Is gradually decreasing
 - D. Is unrelated to increasing longevity
5. The proportion of elderly women in Arabic nations is:
 - A. Growing
 - B. Declining
 - C. Very small compared to men
 - E. About the same as it was 40 years ago
6. Elderly person's height:
 - A. Does not change
 - B. Only appears to change
 - C. Tends to decline
 - D. Depends on their level of activity
7. As compared to younger persons, the elderly (60 or over) are limited in their activity more often by which type of illness?
 - A. Acute illness (short-term)
 - B. Colds and flu
 - C. Infection
 - D. Chronic illness

8. Which type of illness do the elderly have less frequently than younger persons?
 - A. Acute illness (short-term)
 - B. Colds and flu
 - C. Infection
 - D. Chronic illness
9. In the elderly, lung capacity tends to:
 - A. Increase
 - B. Decrease
 - C. Remain the same
 - D. This has never been determined
10. Liver size decreases after the age of:
 - A. 50
 - B. 60
 - C. 70
 - D. 80
11. Compared to young people, cardiac output and recovery time among the elderly is
 - A. Much higher and faster
 - B. Moderately higher and faster
 - C. About the same
 - D. Lower and slower
12. In the elderly, subcutaneous tissues and elastic fibres tend to:
 - A. Increase
 - B. Decrease
 - C. Remain the same
 - D. This has never been determined
13. Compared to persons under 60, sleep patterns among the elderly are:
 - A. Steadily increasing
 - B. The same
 - C. Disturbed
 - D. Steadily decreasing
14. Compared with younger persons, the elderly have:
 - A. More injuries in the home
 - B. About the same number of injuries in the home
 - C. Fewer injuries in the home
 - D. Twice the number of injuries in the home
15. Which of the following statements is correct:
 - A. Most of the elderly live below the poverty level in Saudi Arabia
 - B. The elderly are the poorest group in Saudi society
 - C. The elderly receive enough income to allow them to live independently
 - D. The income gap between the elderly and other adult groups continues to widen
16. The majority of elderly Saudi people live:
 - A. Alone
 - B. In hospital
 - C. With their families
 - D. In social service facilities

17. In Saudi Arabia, the majority of the elderly whose children have left home:
 - A. Have serious problems adjusting
 - B. Have higher levels of life satisfaction
 - C. Try to get their children to return home
 - D. Suffer from "empty nest" syndrome
18. Elderly workers:
 - A. Have higher rates of absenteeism than younger workers
 - B. Cannot be depended on
 - C. Have about the same rates of absenteeism as younger workers
 - D. Have lower rates of absenteeism than younger workers
19. Compared to young people, the majority of elderly are able to adapt to change:
 - A. Less easily
 - B. Easily
 - C. More easily
 - D. About the same
20. As a healthy person reaches old age, his/her voluntary participation in organizations usually:
 - A. Rises
 - B. Remains the same
 - C. Declines
 - D. Declines dramatically
21. The elderly who reduce their activity tend to be:
 - A. Happier
 - B. Not as happy as those who remain active
 - C. Better adjusted than those who remain active
 - D. Healthier
22. Compared to persons under age 60, rates of criminal activity victimization among the elderly are:
 - A. Higher
 - B. Steadily increasing
 - C. About the same
 - D. Lower
23. Compared to younger persons, the elderly:
 - A. Have more fear of crime
 - B. Have the same fear of a crime
 - C. Have less fear of crime
 - D. Have no fear of crime
24. The most law-abiding of all adult age groups is:
 - A. The middle-aged
 - B. Persons in their 30s
 - C. Young couples
 - D. The elderly.

In the remaining three sections, there are five responses after each statement, which range from “strongly agree” to “strongly disagree”. Please circle the number of the response that indicates the degree to which you agree or disagree with each statement **(Only one)**. There are no right or wrong answers: The only correct responses are those that are true for you. Remember that **This questionnaire is not an exam and will not affect your grade. The data will be used for research purposes only and will remain completely anonymous.**

II. Modified Kogan Attitudes Toward the Elderly

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. It would be better if most elderly people lived in housing with people their own age.	1	2	3	4	5
2. It would be better if most elderly people lived in housing that also housed younger people.	1	2	3	4	5
3. There is something different about most elderly people: it is hard to figure out what makes them different.	1	2	3	4	5
4. Most elderly people are not different from anybody else: they are as easy to understand as younger people.	1	2	3	4	5
5. Most elderly people are set in their ways and unable to change.	1	2	3	4	5
6. Most elderly people are capable of new adjustments when the situation demands it.	1	2	3	4	5
7. Most elderly people would prefer to quit work as soon as their children can support them.	1	2	3	4	5
8. Most elderly people would prefer to continue working as long as they can, rather than be dependent on others.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	Most elderly people tend to let their homes become messy and unattractive.	1	2	3	4	5
10	Most elderly people generally maintain a clean, attractive home.	1	2	3	4	5
11	It is foolish to claim that wisdom comes with old age.	1	2	3	4	5
12	People grow wiser with old age.	1	2	3	4	5
13	Most elderly people make people "ill-at-ease" or uncomfortable.	1	2	3	4	5
14	Most elderly people are very easy to be with.	1	2	3	4	5
15	Most elderly people bore others by talking about the "good old days."	1	2	3	4	5
16	Most elderly people's past experiences are interesting.	1	2	3	4	5
17	Most elderly people spend much time prying into the affairs of others.	1	2	3	4	5
18	Most elderly people respect others' privacy and give advice only when asked.	1	2	3	4	5
19	If the elderly expect to be liked, they should eliminate their irritating faults.	1	2	3	4	5
20	Most elderly people have the same faults as anybody else.	1	2	3	4	5
21	In order to maintain a nice neighbourhood, it would be best if elderly people did not live in it	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
22	A nice neighbourhood is one that has a number of old people living in it.	1	2	3	4	5
23	There are a few exceptions, but most elderly people are the same.	1	2	3	4	5
24	Most elderly people are very different from one another.	1	2	3	4	5
25	Most elderly people are untidy in their personal appearance.	1	2	3	4	5
26	Most elderly people are quite clean in their personal appearance.	1	2	3	4	5
27	Most elderly people are irritable and unpleasant.	1	2	3	4	5
28	Most elderly people are cheerful and good-humoured.	1	2	3	4	5
29	Most elderly people are constantly complaining about the young generation's behaviour.	1	2	3	4	5
30	Most elderly people seldom complain about the young generation's behaviour	1	2	3	4	5
31	Most elderly people make excessive demands for love and reassurance	1	2	3	4	5
32	Most elderly people need the same amount of love and reassurance as anyone else.	1	2	3	4	5

III Modified willingness to take care of the elderly

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I want to care for the elderly because they are very easy to care for.	1	2	3	4	5
2	I want to care for the elderly because it is more rewarding to give care to them.	1	2	3	4	5
3	I want to care for elderly people because it is not hard to teach them new information about their care.	1	2	3	4	5
4	I want to care for elderly people because it will help me to care for my parents.	1	2	3	4	5
5	I want to care for elderly people because they can teach me new things.	1	2	3	4	5
6	I want to care for elderly people because they are less demanding for care.	1	2	3	4	5
7	I do not want to care for elderly people.	1	2	3	4	5
8	I do not want to care for elderly people because it is not easy to accept their death.	1	2	3	4	5
9	I do not want to care for elderly people because they complain more than other age groups.	1	2	3	4	5
10	I do not want to care for elderly people because it depresses me.	1	2	3	4	5
11	I do not want to care for elderly people because they	1	2	3	4	5

are sick all of the time.

12	I do not want to care for elderly people because I get more involved emotionally giving care to other age groups than to them.	1	2	3	4	5
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IV. Intention to work with the elderly

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Nursing older people is mainly about basic care - it does not require much skill	1	2	3	4	5
2. I would definitely consider working with older people when I qualify	1	2	3	4	5
3. Work with older people is a dead-end job	1	2	3	4	5
4. I am really looking forward/I really looked forward to my first placement with older people	1	2	3	4	5
5. Nursing older people is challenging and stimulating	1	2	3	4	5
6. Nurses work with older people because they cannot cope with hi-tech care	1	2	3	4	5
7. Working with older people has a high status	1	2	3	4	5
8. Once you work with older people it is difficult to get a job elsewhere	1	2	3	4	5
9. The older you are the easier it is to have a good rapport with older people	1	2	3	4	5
10. I am really anxious/I was really anxious about my first placement with older people	1	2	3	4	5
11. Working with older people does not appeal to me at all	1	2	3	4	5
12. Nursing older people is a highly skilled job	1	2	3	4	5
13. Nursing older people provides little satisfaction as they rarely get better	1	2	3	4	5

14. Working with older people is not a good career move	1	2	3	4	5
15. I think older people are really interesting to nurse	1	2	3	4	5

V. Work preference section

1. Which group do you have experience of caring for? **(Only one)**

- A. Children
- B. Teenagers
- C. Young adults
- D. Middle-aged adults
- E. Older adults/Elderly

2. Are you willing to take care of the elderly people age 60 or over as a career choices?
(Only one)

- A. Yes
- B. No

3. Rank your preference for working with different age groups. # 1 is the age group you most prefer; # 2 is your second choice; # 3 is your third choice and so on to # 8, your least preferred. **Use numbers only once.**

- A. Infants (birth to 1 year) []
- B. Preschool children (2-4 years) []
- C. School age children (5 – 12 years) []
- D. Adolescents (13 to 18 years) []
- E. Young adults (20 – 39 years) []
- F. Middle-aged adults (40 – 55 years) []
- G. Elderly adults (58 – 74 years) []
- H. Older adults (75+ years) []

4. What are the reasons for selecting a career with older people as your most preferred choice?

5. Briefly write your reasons for selecting a career with older people as your least preferred choice? _____

Nursing faculty's attitude and commitment towards gerontology education

Part (1)

Please circle or fill in the appropriate responses to each of the following items: (Only one)

1- Age:

- A.19 to 29
- B.30 to 39
- C.40 to 49
- D.50 to 59
- E.60 and over

2- Marital status

- A. Single
- B. Married
- C. Divorced
- D. Widowed

3-Current job title and gerontology background:

- A. Instructor
- B. Associate Professor
- C. Professor
- D. Other-----

4-Is gerontologic nursing included in the undergraduate nursing curriculum at your institution?

- A. Yes
- B. No

5-How is gerontologic nursing included?

- A. Stand-alone course
- B. Integrated
- C. Other-----

6- Would you be willing to include gerontologic nursing as a stand-alone course in the curriculum?

- A. Yes
- B. No

10. What factor do you think could have the greatest influence on nursing students' career choice toward the care of older people? (Only one)

- A- Teaching methods of gerontologic nursing.
- B. Past experience with older people.
- C. Attitudes of nursing teachers as role models.
- D. Clinical experience.
- E. Peer group.
- F. Other.....

Appendix B

Ethical permission

Mr A Sabry
Saudi Arabian Cultural Office
29 Belgrave Square
London
SW1X 8QB

23 August 2006

Our Ref: MRN/HM/C:/Al Senany/Field trip to
Saudi Arabia

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Dear Mr Sabry

Re: Ms Samira Al Senany

Thank you for your recent correspondence in relation to Ms Al Senany's request to undertake a field trip to Saudi Arabia. As one of Ms Al Senany's academic supervisors here at the School of Nursing and Midwifery, University of Sheffield, I am able to confirm that we recently met to discuss Ms Al Senany's plans for her visit to Saudi Arabia, following which I am happy to support her application.

Please do not hesitate to contact me if you require any further information.

Yours sincerely

Mike Nolan
Professor of Gerontological Nursing

cc Ms S Al Senany

Kingdom of Saudi Arabia
Ministry of Higher Education
King Saud University
College of Applied
Medical Sciences
Dean Office

بسم الله الرحمن الرحيم



المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك سعود
كلية العلوم الطبية التطبيقية
مكتب العميد

Sheffield University

Mrs. Samira Alsenany
7 Bramwell drive
Sheffield S3 7PE
Sheffield University
UK

Dear Mrs Alsenany ,

Graduate student

In reference to your letter requesting permission to conduct your doctoral dissertation research titled "The effect of an integrated gerontological nursing education and clinical nursing practice on nursing students in Saudi Arabia" at the College of Nursing, King Saud University, I wish to inform you that the Graduate nursing board has approved your request.

The College of Nursing willingly grant you permission to conduct your research on the nursing students and faculty. In addition, The College of Nursing will provide you with the assistant needed to complete your task successfully.

Sincerely,

DR. Nazik Zakari
Graduate study coordinator
College of Nursing
King Saud University



KINGDOM OF SAUDI ARABIA
Ministry of Higher Education
KING FAISAL UNIVERSITY



المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك فيصل
الرمز (٠٣٧)

المرفقات :

التاريخ :

رقم :

To : Miss. Sameera Ahmad

From : Proff. Mohammed Hejazi
Dean College of Nursing, KFU

Subject: Data collection

Regarding your request to collect data from our students at college of nursing KFU, we would like to inform you that your request has been accepted and you can start the data collection.

Best regard.....



KINGDOM OF SAUDI ARABIA

Ministry of Higher Education

KING ABDULAZIZ UNIVERSITY

Faculty of Applied Medical Sciences



المملكة العربية السعودية
وزارة التعليم العالي
جامعة الملك عبد العزيز
كلية العلوم الطبية التطبيقية

Ref. FM / / 8

Date 11 / 4 / 2007

الرقم :

التاريخ : 14 / / 1428 هـ

المرفقات :

Miss Samira Alsenany
School of Nursing and Midwifery
University of Sheffield

Dear Miss Samira Alsenany

Graduate student

I received your request pertaining a permission to collect research data for your dissertation titled: The effect of an integrated gerontologic nursing education and clinical nursing practice on nursing students in Saudi Arabia.

I would like to inform you that the Vice-Dean at the graduate studies & the department of Nursing at the Faculty of Applied Medical Sciences has no reservation to facilitate any request that helps you obtaining any information to support your future data collection procedure.

Sincerely

DR.HASNAH ERFAN BANJAR

Vice Dean

Faculty of Applied Medical Sciences

